RELATIONSHIPS BETWEEN TEACHER CHARACTERISTICS AND PARENT PARTICIPATION IN THE FLORIDA MODEL OF FOLLOW THROUGH

By

PATRICIA ELLEN HANLEY

A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1976

ACKNOWLEDGMENTS

I wish to express my appreciation for the professional and personal support that many individuals have generously provided during these past three years. I am deeply grateful.

A very special thank you is extended to my doctoral chairperson, Dr. Ruthellen Crews, for her unqualified support, guidance, and encouragement throughout every phase of my doctoral program. I am poignantly aware of the innumerable contributions she has so graciously contributed to my professional growth and development.

I am, also, appreciative of the assistance and criticism that Dr. Michael Hanes, as doctoral cochairperson, has so ably provided to my research efforts and to the completion of this dissertation. Drs. Kenneth Bzoch, Robert Soar, and Linda Lamme have offered many pertinent suggestions relative to the development, implementation, and completion of my dissertation research.

Drs. Ira Gordon and Gordon Greenwood were instrumental in enabling me to obtain the data for this study. It has been most meaningful that they so willingly invested their valuable time and interest in my work. Additionally, I appreciate the

cooperation of the Follow Through program coordinators, their staffs, the Policy Advisory Committees, and the teachers in the districts where the study occurred.

Further appreciation is extended to Barbara Honn Crow for assistance in actual data gathering; to Carol Jones for her proficient typing; and especially to Arden Goettling for her expert editorial skills and typing assistance in preparing the final dissertation.

My special friends Kenneth Moore, Sue Rimmer, and Diana Meisel were always available to offer their assistance, encouragement, and humor to my task at hand. And to my parents, Jack and Beatrice Hanley, I love you for instilling in me the desire to attain advanced education and for building in me the qualities of character that enabled me to successfully complete the challenge.

TABLE OF CONTENTS

		Page
ACKNOWLEDGMENTS		ii
ABSTRACT		vi
CHAPTER		
I	INTRODUCTION	1
	Statement of the Problem	4
	Limitations	4
	Justification for the Study	5
	Definition of Terms	6
	Hypotheses	10
	Sampling	10
	Data Collection	11
	Data Analysis	13
	Organization of the Dissertation	14
II	REVIEW OF RELATED LITERATURE	15
	Teacher Variables	15
	Teacher Verbal Behavior	16
	Nonverbal Teacher Behavior	20
	Teacher Controlling Behavior	24
	Teacher Demographic Variables	30
	Parent Participation	34
	Summary	35
III	PRESENTATION OF THE DATA	39
	The Florida Model of Follow Through	39
	Description of the Sample	41
	Design of the Study	43
	Instrumentation	43
	Explanation of the Data	45
IV	ANALYSIS OF THE DATA	51
	Data Analysis I	52
	Data Analysis II	60

Page

V CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS 72

Conclusions 72
Implications 73
Recommendations 77

APPENDIX A CLASSROOM PARENT PARTICIPATION MEASURE 80

APPENDIX B CLASSROOM OBSERVATION INSTRUMENT 88

APPENDIX C BASIC RAW SCORE DATA 93

BIBLIOGRAPHY 102

BIOGRAPHICAL SKETCH 106

Abstract of Dissertation Presented to the Graduate Council of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

RELATIONSHIPS BETWEEN TEACHER CHARACTERISTICS AND PARENT PARTICIPATION IN THE FLORIDA MODEL OF FOLLOW THROUGH

By

Patricia Ellen Hanley

August, 1976

Chairperson: Ruthellen Crews
Cochairperson: Michael L. Hanes
Major Department: Curriculum and Instruction

The purpose of this study was to determine if teacher behavior as measured by the Florida Climate and Control System (FLACCS), teacher demographic characteristics (years of teaching experience and years of Florida Model of Follow Through teaching experience), and average classroom enrollment were related either singularly or in combination to the amount of classroom parent participation in the Florida Model of Follow Through Districts A and B as indicated by the reported number of instances of participation from the Parent Educator Weekly Home Visit Report.

Two graduate students who were trained in the use of the FLACCS observed in sixty Florida Model of Follow Through classrooms in the spring of 1975. Two separate sets of independent variables reflecting teacher behavior were obtained. Data

Analysis I utilized variables consisting of derived-scores from specified sections of the FLACCS, and Data Analysis II incorporated variables derived from the FLACCS factor structure. Additionally, each set of variables was examined for linear and nonlinear relationships.

Results of multiple regression analyses indicated the following: (a) Data Analysis I linear variables did not account for a significant ($p < .05$) amount of the variance ($R^2 = .0658$) in classroom parent participation; (b) although Data Analysis I nonlinear variables accounted for 10.05% of the variance in classroom parent participation, it was not statistically significant; (c) Data Analysis II linear variables accounted for 8.09% of the variance in classroom parent participation, but this did not constitute statistical significance; and (d) while Data Analysis II nonlinear variables resulted in $R^2 = .1028$, it was not significant ($p < .05$, $df = 11,48$). It can, therefore, be concluded that for the subjects in this study, the teacher behavior variables, the teacher demographic variables, and average classroom enrollment did not adequately explain the variations in classroom parent participation.

Implications that emerged from this study are (a) individuals other than the classroom teacher have contact with parents and, therefore, may influence classroom participation; (b) teacher behaviors not studied in this research effort may

be related to classroom parent participation; (c) parent involvement options may reduce the amount of classroom parent participation; (d) logistic considerations such as younger children in the home, lack of transportation, and daytime employment may serve as limitations to classroom participation by parents;(e) rather than examining variations in total instances of classroom parent participation, it might be more meaningful to consider the percentage of parents available per classroom or the pattern of participation per classroom.

CHAPTER I

INTRODUCTION

The school has become the focal point of change in our society. Brottman (1971) voiced this view when he stated that "it has been shown that as the needs of society have changed, the changes have been reflected first in school curricula, then in expectations for teacher performance" (p. 1). The reflection in the schools of the changing needs of society has been especially prominent in many of the federally funded early childhood education programs for low income or disadvantaged children. The need for compensatory educational programs was the first of these changing needs to be felt in the schools. Disadvantaged children were having difficulty bridging the gap between their low-income homes and the schools that were geared to middle-income children.

With the advent of the Johnson Administration's War on Poverty and subsequent funding for Projects Head Start and Follow Through, parent involvement was mandated as part of the curriculum in early childhood education programs. Teachers were expected to involve parents in their children's education in school.

The school's reflection of the changing needs of society has also been prominent at the state level. The Florida Legislature passed Committee Substitute for Senate Bill No. 96 (CSSB #96) in July, 1974. This legislation mandated expectations for teacher performance by the 1976-77 school year. School systems must have plans for "directly involving parents in the classroom program and program evaluation" (CSSB #96, 1974, p. 2).

Once changes in societal needs have been felt in the school, changes in teacher performance usually follow. These changes in teacher performance are directly reflected in their observable classroom behaviors. Withall (1972) points out that "professionals fulfill their functions to their clients through a repertoire of varying behaviors that encompass everything they say or do relative to the clients" (p. 331). It is generally recognized that parents, as well as children, are clients of the classroom teacher, particularly in early childhood education.

The day-to-day control over the students and climate of the classroom are determined by the teacher during interactions with the students (Good & Brophy, 1973). The way in which a teacher establishes climate and control in a classroom is reflected in the teacher's behavior. But a large percentage of teachers at every grade level are unaware of their behavior

or of the impact of their behavior on the learners in their classroom (Withall, 1972).

Recently, many research studies (Flanders, 1970; Measel & Mood, 1972; Samph, 1974; Soar, 1966, 1973; Wodtke & Wallen, 1965) have attempted to learn more about the teacher's influence on various aspects of the classroom. These studies have attempted to investigate teachers' influences by focusing on the observable behavior of the teacher and correlating it with pupil measures of achievement, growth, creativity, and classroom climate and control.

Educational interest has been directed toward early childhood education and parent participation. Early childhood curriculum models specify parent participation as desirable; program sponsors suggest specific ways to involve parents; principals and supervisors suggest kinds and amounts of parent participation they feel should be present in early childhood classrooms. Ultimately the decisions are the teachers. For as Sigel and Jackson (1969) noted,the teacher is the person directly and consistently in charge of the classroom, and it is the teacher who must implement and maintain the parent participation component of the curriculum model. These authors further stated that:

> The degree to which the teacher is committed to carry out the substance as well as the spirit of an educational innovation, to that degree can the

> program be effective. Irrespective of the state of the learner, the elegance of the program, with its accompanying technology, the enthusiasm of principals, superintendents or administrators, the teacher's involvement is the key. (p. 1)

Statement of the Problem

The purpose of this study was to determine if teacher behavior as measured by the Florida Climate and Control System, teacher demographic characteristics (years of teaching experience and years of Florida Model Follow Through teaching experience), and average classroom enrollment were related, either singularly or in combination, to the amount of parent participation in the Florida Model of Follow Through Districts A and B as indicated by the reported number of instances of participation from the Parent Educator Weekly Home Visit Report (PEWR, 1974).

This study was concerned with determining whether there was a relationship between the way that teachers control students in the classroom and the amount of parent participation in the classroom. Teacher characteristics, other than indices of behavior or control, were included as variables in the study in order to determine if they might account for variations in the amount of parent participation between classrooms.

Limitations

This study was confined to 60 of the 69 early childhood

teachers in two communities of the Florida Model of Follow Through. Nine teachers and the classroom parent participation generated by those classrooms were unable to be included in the sample due to the teachers' absence from the classroom during the period of observation. Several reasons for the teacher's absence from the classroom were personal illness, field trips, workshops, or the presence of a student teacher. Therefore, the final sample utilized in the data collection and analyses included 60 early childhood teachers who taught in Florida Model of Follow Through District A and District B during the spring of the 1974-75 academic year.

Justification for the Study

Teachers in Florida public school early childhood classrooms are going to be required to "directly involve parents in the classroom program" (CSSB #96, 1974, p. 2). Will all teachers be able to implement this endeavor with equal facility? Are there some teachers with particular attributes or characteristics who are likely to be more responsive to, or facilitative in, involving parents in the classroom?

In order to ascertain if there is a relationship between teacher characteristics and classroom parent participation, it seemed most appropriate to examine early childhood classrooms

that already comply with the substance of this legislation. The Florida Model of Follow Through was selected to be the population studied since parent participation is the underlying philosophy on which the model has been developed.

Another premise on which to base this research endeavor is the lack of empirical evidence explaining variations in amounts of classroom parent participation in programs that include it as an integral curricular component. This study examined teacher characteristics to determine if they account for variations in amounts of classroom parent participation. Additionally, teacher characteristics have not been examined to see if they are singularly, or in combination, related to the amount of parent participation in the classroom.

Finally, educational researchers in the past have tended to search for linear relationships between specific sets of variables. In addition to examining the data in terms of existent linear relationships, the data in this study were analyzed for potential nonlinear relationships.

Definition of Terms

1. Early Childhood Classrooms are defined for the purpose of this study as kindergarten, first, second, and third grade classrooms in the Florida Model of Follow Through in District A and in District B.

2. Committee Substitute for Senate Bill No. 96 (CSSB #96) is a comprehensive educational plan for early childhood and elementary education in Florida public schools. The bill's effective date was July 1, 1974.

3. Florida Model of Follow Through is a home- and school-based early childhood program for disadvantaged children with primary focus on the involvement of parents as teachers of their own children in their home, as classroom volunteers, as paid aides (parent educators), and as decision-makers in the educational program. It should be noted, however, that Florida Model of Follow Through classrooms are populated by disadvantaged children and nondisadvantaged children. The only distinction made between the students is that the disadvantaged children qualify for the comprehensive services available through Follow Through.

4. Policy Advisory Committee (PAC) is composed of parents of students enrolled in Follow Through classrooms, representatives of local community groups, and individuals from antipoverty agencies. The aim of PAC is to participate directly in all phases of project development and operation (Hillsborough Follow-Through Teacher Guide Book, 1974-75, p. 2).

5. Parent Educators work as members of the classroom staff/

team and serve as liaison between the home and the school. Half of their time is spent in the classroom serving as the teacher's assistant; and the other half of their time is spent making home visits to help parents work with their children during out-of-school hours. There are two parent educators assigned to each classroom of approximately 25 children.

6. Parent Educator Weekly Home Visit Report (PEWR) is a summarization of the weekly home visit (Appendix A). The parent educator completes the PEWR following the home visit to every family in their assignment. Home-school information recorded in the PEWR includes data such as "information concerning PAC, comprehensive services, ideas for new tasks, feedback on previous home tasks, and classroom parent participation" (Gordon, Greenwood, Ware, & Olmsted, 1974, p. 6).

7. Florida Climate and Control System (FLACCS) is a systematic observation instrument that measures teacher control of students and the nature of the emotional climate of the classroom (Appendix B). Behaviors detectable with the FLACCS are verbal and nonverbal control and positive and negative affect.

8. Teacher Behavior is described as those observed actions having to do with the manner in which the teacher

established and maintained control and climate in the classroom as determined by the Florida Climate and Control System.

9. Teacher Demographic Characteristics examined in the course of this study are total years of teaching experience and Follow Through teaching experience.

10. Parent indicates either the parent or person who was available to substitute for the parent and who participated in the educational program. The available person could be a grandparent, an aunt, an uncle, or older sibling of a child who was enrolled in the Florida Model of Follow Through classroom.

11. Classroom Parent Participation were those instances when a child's parent(s) or relative was involved directly in classroom activities that ranged from observation, to assisting in special classroom projects, to teaching an individual child or a small group of children.

12. Amount of Classroom Parent Participation for District A and District B was indicated by the total number of instances when parents were in classrooms as determined by a tabulation of the total yearly responses to PEWR Item 51, Did you participate in your child's classroom this week?

Hypotheses

Specifically this study was designed to test the following null hypotheses regarding District A and District B of the Florida Model of Follow Through during the 1974-75 academic year:

> Hypothesis I. When the predictor variables of teacher behavior as measured by the Florida Climate and Control System - Data Analysis I variables, teacher demographic characteristics of years of teaching experience and years of teaching in the Florida Model of Follow Through, and average classroom enrollment are combined in a regression equation, they do not account for a significant amount of variation in classroom parent participation as indicated by tabulations of the "YES" responses to Item 51 on the Parent Educator Weekly Home Visit Report--"Did Mom work in the class last week?"
>
> Hypothesis II. When the predictor variables of teacher behavior as measured by the Florida Climate and Control System - Data Analysis II variables, teacher demographic characteristics of years of teaching experience and years of teaching in the Florida Model of Follow Through, and average classroom enrollment are combined in a regression equation, they do not account for a significant amount of variation in classroom parent participation as indicated by tabulations of the "YES" responses to Item 51 on the Parent Educator Weekly Home Visit Report--"Did Mom work in the class last week?"

Sampling

This study included all classroom teachers, their parent educators, and the parents of the children enrolled in the Florida Model of Follow Through in two southeastern school

districts. District A is located in a large urban community with 34 teachers in the program. District B includes schools in a medium-sized urban community and in a rural community with 35 teachers in the program. Attrition due to illness or absence from the classroom during the scheduled observation period reduced the actual classroom sample size to 60 teachers.

The University of Florida Committee for the Protection of Human Subjects granted approval for the study. Permission to use Follow Through classrooms was obtained through the Project Director, the Program Coordinators, and the Chairpersons who represent the PAC from each location.

Data Collection

Data were gathered by two graduate students who were trained in systematic observation procedures utilizing the Florida Climate and Control System (FLACCS). Training procedures included working through a series of four video tapes compiled by Drs. Robert and Ruth Soar and Marjorie Ragosta, for use with the FLACCS. This procedure served to thoroughly familiarize the observers with the individual items on the FLACCS as they appear in the context of actual classrooms. Following this phase of training, the observers made in-school observations in order to field-test their training, to develop inter-rater agreement, and to further familiarize themselves with the FLACCS items.

To culminate the training procedures, and prior to data gathering in the Follow Through classrooms, the observers rated a Criterion Video Tape in order to establish validity with the developers and inter-rater agreement with each other.

Observations were made in 60 Florida Model of Follow Through classrooms in District A and in District B during the month of May in the 1974-75 academic year.

Inter-rater agreement in the use of the FLACCS was established daily by having both observers rate the first classroom together each morning. Inter-rater agreement of 80% or better was the criterion considered as acceptable for this study. Once high inter-rater agreement was established, the observers were assigned to separate classrooms. The number and grade levels of the classrooms was distributed as evenly as possible between the observers.

Prior to the observation, each teacher was asked to sign a letter of informed consent. Observation procedures in each classroom began with an adjustment period to enable the observer to acclimatize to that particular classroom. This was followed by a series of three observations and ratings with the FLACCS.

Intra-rater agreement was verified during the actual data gathering by having the observers rate the Criterion

Video Tape following data collection in District A and prior to data collection for District B.

Data Analysis

Multiple regression analysis is described by Kerlinger and Pedhazur (1973) as a method of "applying the collective and separate contributions of two or more independent variables to the variation of a single dependent variable" (p. 3). Additionally, multiple regression analysis enables the researcher to handle data when intact existing groups are used (Kerlinger & Pedhazur, 1973).

For Data Analysis I, seven independent variables were employed, and Data Analysis II employed eleven independent variables. Additionally, the two Florida Model of Follow Through districts were used intact as data-gathering sites. Therefore, the nature of this data lends itself most appropriately to multiple regression analysis.

From a multiple regression analysis the following information is yielded: (a) the degree of the relationship of the independent variables to the dependent variables; (b) the statistical significance of that relationship; and (c) the relationship of combinations of independent variables in accounting for the variance in the dependent variable.

Biomedical Computer Program, BMD 02R, was used to perform

a stepwise multiple regression analysis (Dixon, 1973). Both Hypothesis I and Hypothesis II were tested for significance with the utilization of an F-test at the .05 level.

Organization of the Dissertation

This dissertation is organized into five chapters and it includes a bibliography, appendices, and biographical sketch of the investigator. The first chapter contains the introduction to and statement of the problem and the specific null hypotheses examined in this study. The review of literature on teacher classroom behavior and its effects upon the learning environment is contained in Chapter 2. The third chapter describes the methodology utilized throughout the research effort.

Chapter 4 contains the procedures for analysis of the data. The fifth chapter is a summary of the study and the conclusions and implications that can be drawn from these research findings.

The bibliography includes references used directly in the body of the dissertation.

CHAPTER II

REVIEW OF RELATED LITERATURE

Two principal areas should be considered in a study of the relationship of teacher characteristic variables upon classroom parent participation. These areas include (a) a review of the empirical and theoretical literature related to the effect of teacher characteristic variables on the learning environment, and (b) a review of literature related to those variables which have been associated with classroom parent participation.

Teacher Variables

The classroom teacher is the individual who has the opportunity to have the most direct influence on many aspects of the learning environment. "Since the teacher generally determines the content and student participation in activities, the effectiveness and, indeed, the very nature of the learning experience must be dependent upon the decisions and behaviors of the teacher" (Balzer, 1970, p. 26). Flanders (1970) stated that "over an extended period of time, much of what a pupil

does in the classroom is literally shaped by the teacher. The teacher's only choice is how much influence he will share, under what conditions, and for how long" (p. 345).

Many factors contribute to the manner in which the teacher behaves: the curriculum model, administrators, students, parents, personal matters of concern to the teacher, and many more. When a teacher enters the classroom and begins to interact with students, it is only his/her behavior that can be directly observed and, subsequently, related to behavioral outcomes of the children, such as achievement in reading or math, creativity, anxiety, and problem solving.

Teacher Verbal Behavior

Several studies of various teacher verbal behaviors indicate that various pupil outcomes were engendered as a result. Freidman and Bowers (1971) used the Observation Schedule and Record (OScAR 4V) to study the effects of the verbal characteristics of 30 teachers on two male and two female students (N= 120) from their classes. Ten classes each were selected from an urban preschool and an inner-city public school kindergarten and first grade class. A two-way analysis of variance revealed that imitation of the teacher's statement referring directly to classroom content and containing no affect accounted for the largest amount of variation among the three grade levels.

Additionally, the study revealed that children from successive grade levels manifested statistically significant amounts of verbal imitation of teachers' verbal behavior. These findings suggest that the teachers' verbal characteristics, or verbal behavior, influence a child's imitative behavior, though there are grade level differences and differences in the kind of verbal behavior imitated.

A study by Measel and Mood (1972) utilized Flanders' 10-category system of interaction analysis combined with a system of levels of thinking to observe elementary school teachers verbal behavior and level of thinking, and pupil verbal behavior and level of thinking. The subjects were 15 second grade teachers and 399 students from three middle- to upper-middle-class Michigan communities. Teachers were categorized as having indirect influence in their verbal behavior (accepts, praises, questions) or as having direct influence in their verbal behavior (lectures, directs, criticizes) by means of Flanders' indirect/direct (I/D) ratio with the median score as the cut-off point for the teacher groups. The results of the Mann-Whitney U test indicated that there was no statistically significant relationship between the mode of directness or indirectness of teachers and their pupils' use of higher levels of thinking. Although the sample size was small, the authors found that the group of teachers tended to be a group

of direct teachers and did not vary greatly in their verbal influence. When the teachers were grouped as being characterized by high or low levels of thinking, it was found that this type of verbal behavior was related to the pupil level of thinking. Teachers functioning at higher levels of thinking had pupils who tended to function at those levels.

Feshbach and Feshbach (1972) examined the effects of a white teacher's positive and negative comments on the animal preference of 30 experimental and 27 control children. The male subjects in the study ranged in age from nine to twelve years. The experimental group consisted of 21 white males and 9 black males; the control group consisted of 13 white males and 14 black males. An analysis of the data showed that the white subjects did not significantly alter their animal preference, but the change of animal preference for the black subjects was statistically significant. These results indicate that teacher verbal behavior, in this case positive or negative comments, has differential effects on male children of similar ages who have dissimilar racial backgrounds.

Samph (1974) analyzed data from a previous study by Flanders to examine (a) the extent to which teacher verbal behavior influences the language skill development of below-average achievers and (b) the attitude of those same subjects relative to the type of teacher verbal behavior patterns to

which they were exposed. Samph found that students of indirect teachers showed greater posttest achievement scores even when adjustments were made for possible variations in I.Q. and the number of below-average achievers taught by each teacher. The students of the indirect teachers had the more positive attitudes toward their teacher. Additionally, the resultant analysis suggested that teachers' indirect verbal behavior fosters both increased language skill development and a positive attitude toward the teacher in this group of below-average achievers.

Alpert (1974) conducted a study of 15 second grade teachers in an effort to determine if teachers used more good behaviors with high- or low-ability reading groups. Good behaviors were considered as the amount of time, the amount of best time, the number of materials, the number of pupils, and the number of good verbal behaviors. Among the good verbal behaviors observed were praise for reading, support, reinforcement, encouragement, sequencing, and demonstration. No statistically significant differences were found in the amount of good behavior or the amount of good verbal behaviors that the 15 teachers showed with high- and low-ability reading groups. Alpert also found that the teachers did not exhibit preferential treatment to the top and bottom reading groups with respect to good behavior or good verbal behavior.

Nonverbal Teacher Behavior

Studies conducted by Goldberg (1972), Goldberg and Mayerberg (1973), and Middleman and Hawkes (1972) indicated that the teacher's nonverbal behavior also effect the classroom environment. Goldberg (1972) conducted a field experiment on the effects of positive, negative, and neutral nonverbal teacher behavior on student performance in an elementary school in Philadelphia, Pennsylvania. The subjects in this study consisted of a random sample of 60 second grade and 60 sixth grade children. The sample in this multigroup posttest only design was stratified by race and sex at each grade level and then randomly assigned to one of three treatments. The treatment consisted of three separate video-tapes made by a female white teacher who was trained to teach a drawing lesson and to provide the subjects with instructions to enable them to perform a cognitive and a noncognitive task following the taped presentation. The teacher varied her nonverbal behavior on each video-tape to reflect either positive, negative, or neutral nonverbal behavior, and her verbal behavior across the three video-tapes was held constant with the utilization of a script. Subjects were evaluated in their performance of a cognitive and a noncognitive task following the viewing of their assigned video-tape. Analysis of the data produced the following findings:

1. The cognitive task performance was statistically significantly better for subjects with the positive and the negative nonverbal teacher behavior than with the neutral nonverbal teacher behavior.

2. The noncognitive task performance was statistically significantly better for subjects experiencing the positive and the neutral nonverbal teacher behavior than for those experiencing the negative nonverbal teacher behavior.

3. An interaction effect was found between grade level and the neutral nonverbal teacher behavior in that sixth grade subjects performed statistically better than the second grade subjects experiencing the same treatment (1513A).

Goldberg and Mayerberg (1973) investigated student evaluations of affective teacher behavior reflecting positive, neutral, and negative affect. The subjects (N=120) in the study consisted of 60 randomly selected black and white second grade and 60 randomly selected black and white sixth grade students in an urban elementary school. Naive subjects viewed three separate video-tapes of the same white teacher as she exhibited positive, neutral, and negative affective behavior, respectively. A five-point semantic differential on the concept of THE TV TEACHER was administered to each subject immediately preceding the viewing of the video-tape. The results of the analysis of the multigroup posttest only design indicated the following results:

1. Black subjects rated the neutral teacher significantly higher than did the white subjects.

2. Second grade subjects rated the neutral teacher significantly higher than did the sixth grade subjects.

3. Second grade subjects rated the neutral teacher and the positive teacher similarly, and the sixth grade subjects rated the neutral teacher and the negative teacher similarly.

4. Black second graders rated the neutral teacher significantly higher than did any of the other groups (pp. 30-31). These findings suggest that varying types of teacher affective behavior elicit differential evaluations from students by race and/or grade level and across race and/or grade level.

Middleman and Hawkes (1972) conducted a research study in an effort to determine the effects of positive, negative, and neutral nonverbal teacher behavior upon disadvantaged inner-city black children (N=90) and middle- and low-middle-socioeconomic suburban white children (N=90). Subjects were randomly selected and randomly assigned to one of three treatment groups at the separate schools. This random assignment resulted in the formulation of six treatment groups varying in mode of nonverbal behavior exhibited by the video-taped teacher and by socioeconomic backgrounds of the subjects.

Middleman and Hawkes (1972) hypothesized that differential nonverbal teacher behavior would effect student performance as

well as student preference for mode of teacher nonverbal behavior. Performance of the subjects was measured by three tasks that emphasized (a) accuracy in following directions; (b) accuracy in hearing and extracting information from a verbal context; and (c) the amount of words produced in a required essay. The teacher preference of subjects was obtained by means of a postexperimental questionnaire. A two-way analysis of variance, accompanied by a Tukey multiple comparison, indicated the following results:

1. With regard to affect-style, there were no significant effects on any of the tasks for the white low-middle- and middle-socioeconomic subjects.

2. On Task 1, black low-socioeconomic subjects responded more productively to negative affect-style than they responded to positive or neutral affect-style.

3. Lower-middle- and middle-socioeconomic subjects preferred the teacher in the positive, negative, and neutral affect-style in their respective order, while lower socioeconomic subjects showed no preference (pp. 5-6).

In regard to the third finding listed above, Middleman and Hawkes had 90 graduate students rate the teacher's affect-style. The researchers concluded that the children were more "tolerant" and accepting of all affect-styles than were the adults.

Teacher Controlling Behavior

The teacher's controlling behavior also affects the classroom environment. Turner and Denny (1969), in a study of 30 sixth grade teachers in central Indiana, found that teachers who were characterized as having a high degree of organization tend to depress changes in pupil creativity. These researchers concluded that "it was possible that these teachers were too businesslike, or perhaps over-controlling in their relationships with children" (p. 270).

In a study conducted by Spencer (1973), three first grade teachers were trained to use verbal disapproval as a punishment technique for classroom control of observed mouthing behavior of four students in each of their classes. Mouthing was operationally defined as placing inappropriate objects, such as fingers or pencils, in the mouth. In the first week of employing this teacher behavior, mouthing behavior of the subjects increased. During the second week, the treatment was withdrawn and student mouthing behavior returned to the baseline level that was ascertained prior to the instigation of any teacher verbal disapproval. During the third week, teachers were to make positive comments regarding behavior that was incompatible with the mouthing behavior. For instance, when a child was mouthing a pencil, the teacher might say, "Your handwriting is very neat." During this phase, mouthing

behavior decreased. In the final phase of the study, the teachers repeated their verbal disapproval used in the initial phase. Student mouthing increased.

Spencer (1973) concluded that the better method for controlling student inappropriate behavior would be the positive reinforcement of responses incompatible with the inappropriate act and the ignoring of the inappropriate act itself. Although the sample size in the Spencer study was somewhat limited, the findings suggest that the teacher's behavior often has the opposite effect on student's behavior than was intended.

Hudgins and Ahlbrand (1970) studied nine seventh, eighth, and ninth grade teachers and the extent to which they encouraged or permitted pupil verbal participation in the classroom. Subjects for the study were an intact group of teachers. It was found that:

> Teachers differed by grade level in the amount of pupil verbal participation in the classroom, in the tactics employed to involve pupils in classroom discussion, and with respect to how individual pupils became direct participants in classroom interaction. (p. 267)

In summarizing these findings, the authors caution that the relationships were intended to be suggestive of possible control exerted by the teacher rather than definitive statements regarding teacher control.

Wodtke and Wallen (1965) studied the effects of high- and low-controlling teachers on pupil creativity gains. Subjects

of this study were two high- and two low-controlling teachers from second grade, third grade, and fourth grade; three high- and two low-controlling teachers from fifth grade; and two other teachers who had high control but with warmth and affection. The results of a one-way classification analysis of variance indicated the following:

1. There were no statistically significant differences in pupil creativity gains in second or third grade relative to the level of teacher control.

2. Fourth grade pupils of high-controlling teachers evidenced smaller mean residual gain scores than students of low-controlling teachers.

3. Fifth grade pupils of high-controlling teachers evidenced larger mean residual gains on nonverbal elaboration than did pupils of low-controlling teachers (p. 81).

In 1966, Soar initiated an extensive study related to teacher controlling variables. The subjects in the study were the teachers and pupils in 57 classrooms, grades three through six, in four elementary schools from two systems in a metropolitan area of central South Carolina. The classroom behavior of teachers and pupils was observed in the middle months of each school year for two years using the South Carolina Observation Record (SCOR).

The children in Soar's pupil sample were pre- and posttested

in the spring and the fall of the first project year and again in the spring of the second project year. Four classrooms were identified at each grade level that represented the following combinations of teacher behavior: high control - high hostility; high control - low hostility; low control - high hostility; and low control - low hostility. A three-way (2 x 2 x 4) factorial analysis of variance yielded the following results for the first year of the study:

1. In vocabulary, indirect teaching produced greater growth than direct; more learning in classrooms with warmer emotional climates than in one of hostility; the combination of indirect teaching and low hostility produced the greatest gains of all; and grade level is a significant factor in vocabulary, except for fourth grade.

2. In reading, differences in emotional climate did not produce differences in growth; no differences were attributed to grade level; indirect teaching produced greater growth than direct; and a combination of indirect-high hostile teachers had greater pupil growth, while direct-high hostile teachers had the least growth.

3. In creativity, grade level had the most significant influence with nonverbal creativity showing the most growth at the fourth grade; and the interaction of control with grade level was significant at the .05 level, with higher gain under

direct control at third grade, but under indirect control for the other grades (pp. 146-151).

Due to local school district administration of tests to entering sixth graders, Soar (1966) was able to analyze pupil growth during the summer. A two-factor ANOVA for unequal and disproportionate N's using the climate and control dimensions as classifications yielded the following results:

1. For vocabulary, emotional climate from the preceding year had no significant effect on growth, while teacher control produced a significant difference in favor of indirect control.

2. Classroom conditions from the previous year were not significantly related to summer reading growth.

3. Summer growth in arithmetic concepts and problems was significantly different in favor of low hostility-indirect teaching (pp. 159-163).

Commenting on these findings, Soar stated that "continued academic growth during the summer months following optimal kinds of classrooms points to the effect of the classroom beyond the confines of the room itself" (p. 299). He found that different kinds of classroom teacher behavior produce some kinds of growth but not others.

In a review of research relating classroom process to pupil change, Soar (1972) summarized the findings as follows:

> (a) in general, greater pupil freedom (. . . "indirect" teacher behavior . . .) is associated with increased subject matter growth and more favorable attitudes; (b) relatively simple-concrete measures of pupil growth are facilitated by less freedom, or more structure, than more abstract-complex measures of growth; (c) but even abstract-complex pupil growth may be lessened by too little structure, or too much pupil freedom. (p. 172)

Soar (1973) analyzed observational data gathered from 289 Follow Through and comparison classrooms in the winter of 1971. Eight different Follow Through models were included in this national evaluation. Comparison classrooms were selected as an attempt to determine if potential results were due to program differences or school system differences.

Factor analysis of one of the observational instruments used in this study, the FLACCS, indicated that (a) strong teacher control, that is, managing the classroom by use of coercive control methods and negative affect, elicited resistance by pupils in the form of passive or apathetic responses; (b) gentle teacher verbal control was associated with pupil positive affective behavior; (c) active pupil negative behavior apparently occurred in the absence of teacher control; and (d) outgoing teacher positive affective behavior was associated with pupil positive affective behavior in task-oriented situations (Soar, 1973). Teacher behaviors were associated with various pupil behaviors.

Examination of relationships between classroom behavior and pupil growth indicated that "FLACCS 1, Strong Control, was

associated with the most pupil /cognitive/ growth . . . when Strong Control was either at a maximum or at a minimum, but least growth when it was at an intermediate value" (Soar, 1973, p. 202). Additionally, "factors reflecting both positive and negative affective expression tended to relate negatively to pupil gain, but greater amounts of either tended to occur in less structured settings" (p. 203).

Teacher Demographic Variables

Variables other than teacher behavior affect classroom environment. McDaniel (1974), in an effort to conceptualize a design for a longitudinal study of educational effects, has attempted to identify such variables. McDaniel concluded that:

> The school organizational climate sets the context within which teaching takes place. Teaching is further constrained by the physical environment of the classroom, the adequacy of materials and equipment, and the number of pupils in the class. Given the context, the teacher is certainly the most important element in the classroom. (p. 4)

McDaniel does not say in what ways the number of pupils in the class is a constraint, but only that it is considered an environmental constraint with which the teacher must cope.

Sigel and Jackson (1960) attribute the success of intervention programs as being "ultimately dependent upon the teacher's acceptance, commitment, and skill in carrying out the program" (p. 1). It can, therefore, be inferred that years of teaching experience, and more specifically, the years of

teaching experience in a particular intervention program, might effect the teacher's ability to implement the program.

As part of the evaluation of two national samples of Head Start classes, Dunteman and Rao (1972) studied the relationship between teacher demographic variables (e.g., ethnicity, years of education, training in early childhood, and residence in the same community as the students) and children's academic progress. With the exception of the teacher's age, there were no substantial or consistent relationships between these teacher demographic variables and student progress in either 1967-68 or 1968-69. In addition, the authors report the following results:

> In 1968-69, older teachers tended to be consistently associated with greater improvement in the children's cognitive behavior as reflected by both adjusted and unadjusted gain scores. (p. 166)

Although the authors did not comment on the length of the teaching experience accumulated for each teacher, it seems logical that the older teachers may have had more years of teaching experience than younger teachers.

In a report on two studies that examined the effects of preschool teacher behavior on children's task and nontask behavior, Fagot (1973) found that there were no significant differences in the children's performance that could be attributed to the years of teaching experience of the individual teacher. However, it should be noted that the sample size for both Fagot studies was six. The same six teachers served as

the sample for both studies. The very small sample sizes lead to questioning the validity of the findings. It can be concluded that a much larger sample would be necessary in order to arrive at any conclusive results.

Stallings (1974) directed an evaluative study of 35 Follow Through classrooms encompassing seven sponsors. A control group of 35 non-Follow Through classrooms were matched to the experimental group. Sponsors cooperated in the development of implementation scores that reflected the degree to which individual sites conformed to the model's expectations. The major analysis effort of the study was the relationship between teacher characteristics and classroom implementation of the model. Years of teaching experience in Follow Through was one teacher characteristic studied. Stallings reported that the relationship between years of Follow Through teaching experience and classroom implementation scores varied among the different models. Specific findings indicated that

1. For the Far West and Bank Street models, years of Follow Through teaching experience was significantly related to classroom implementation of the model.

2. For the University of Oregon and the University of Kansas models, there was no significant relationship, though years of Follow Through teaching experience was positively correlated with classroom implementation of the model.

3. For the University of Arizona and the Educational Development Corporation's models, there was a negative, though not significant, relationship between years of Follow Through teaching experience and classroom implementation of the model (p. 16).

Stallings concluded that, for some models, the teacher's experience in the model was positively related to the classroom implementation of the model, while the converse was true for other models.

Years of teaching experience was a presage variable considered by Soar (1966) in a study that involved 57 third through sixth grade teachers in central South Carolina. The years of teaching experience were significantly positively "related to pupil growth in arithmetic problems and significantly negatively related to pupil report of non-teacher assigned seatwork" (p. 266). Soar clearly stated that the resultant relationships could have occurred by chance.

In summary, a review of empirical and theoretical literature related to the effects of teacher characteristic variables on the learning environment has indicated that teacher verbal behavior, nonverbal teacher behavior, teacher controlling behavior, and teacher demographic variables are related differentially to certain pupil outcomes, but not others. Additionally, some teacher characteristic variables differed in their

effects depending upon the pupils' grade level, race, academic subject, and/or the nature of the performance being evaluated.

Parent Participation

An extensive search for research studies that examined variables related to varying amounts of parent participation in early childhood classrooms yielded the research study conducted by Bauch, Vietze, and Morris (1973).

This study was undertaken in an effort to identify factors that may influence parent participation in 31 Head Start classrooms located in five different centers in Alabama. Data were collected by the administration of a semantic differential and a questionnaire to 31 teachers and aides plus 175 families. While 94% of the teachers and aides (N=29) returned the data collection instruments, only 57% of the families (N=99) returned the questionnaires and semantic differentials. A one-way analysis of variance of the amount of parent participation (as indicated by mean clock hours per participating family per month excluding paid volunteers) showed that the differences between the five centers were significant ($F=3.71$; $df=4,84$; $p<.01$). In addition to the administration of the semantic differential and questionnaire, other characteristics (nature of the educational program, strategies used to achieve parent

participation, type of parent participation activity, etc.) were examined by visual examination of a summary chart. The authors concluded that the amount of parent participation visually appeared to be negatively related to center size, with the smallest center having the largest amount of parent participation.

Bauch and others gathered all data for the independent variables by self-report instruments that reflected opinions or attitudes, none of which could be substantiated by observation. Also, return rate for data from parents was rather low (57%). Bauch and his colleagues failed to utilize tests of statistical significance to arrive at their primary question, which was to identify factors that may influence parent participation. The researchers statistically determined that there existed a significant difference in amounts of parents participation between centers, then addressed the primary question by visual inspection of a summary chart of Head Start Centers' characteristics. Questionable methods of data collection and nonstatistical data analysis preclude drawing any valid conclusions from the Bauch study.

Summary

These studies examined the degree of the relationship of various teacher behaviors to pupil behavior, or achievement,

outcomes. Indirect verbal teacher behavior, characterized by praise, acceptance, and questions, was found (a) related to increased language skill development for below-average achievers (Samph, 1974); (b) related to more positive pupil attitudes toward the teacher for below-average achievers (Samph, 1974); (c) unrelated to students' verbal behavior (Measel & Mood, 1972); and (d) unrelated to high- or low-ability level reading students' instructional treatment (Alpert, 1974). Though these findings were few, they indicated that indirect verbal teacher behavior influences various pupil outcomes differentially.

Teacher verbalizations referring to classroom content, without the use of affect, were imitated by preschool through first grade children (Freidman & Bowers, 1971). Positive and negative teacher comments influenced the animal preference of black boys but had no effect on the preference of white boys (Feshbach & Feshbach, 1972).

Various types of teacher affect (positive, negative, or neutral nonverbal, or affective, behavior) elicit differential performance by students of varying race and/or grade level and across race and/or grade level depending upon the nature of the task (Goldberg, 1972; Goldberg & Mayerberg, 1973; Middleman & Hawkes, 1972). Though these findings were not consistent, they point to the need to examine teacher nonverbal, or affective, behavior as a potential source of variance in the pupil classroom functioning.

Teaching experience, teacher's age, and teaching experience in a specific program were not consistently related to program or pupil outcomes, but they are, historically and logically, teacher attributes that need to be considered when examining teacher influence (Dunteman & Rao, 1972; Fagot, 1973; Sigel & Jackson, 1969; Soar, 1966; Stallings, 1974).

Teacher high- or low-controlling behavior influences pupil behavior and performance depending on the nature of the subject matter, the kind of pupil behavior, the age of the student, and the socioeconomic background of the students (Hudgins & Ahlbrand, 1970; Soar, 1966, 1973; Spencer, 1973; Turner & Denny, 1969; Wodtke & Wallen, 1965). This suggests that the level of control exerted by the teacher should be examined relative to the subjects under study and relative to the concepts being investigated.

Contrary to other studies examined in this review, Soar's (1966, 1973) investigations considered the possibility of non-linear relationships of teacher variables to pupil outcomes. Soar concluded that there seemed to be optimal levels of teacher behavior that were beneficial to student performance; and below or beyond these optimal levels, student performance was less successful. Soar's studies also provided evidence that teacher behavior extends beyond the period of direct contact between teacher and child.

Bauch and others (1973) examined parent classroom participation in Head Start in relation to center size and self-report data from teachers and parents. Teacher characteristics were not examined as a potential source of influence. Findings from this study were inconclusive.

Studies of teacher characteristics, such as verbal behavior, nonverbal behavior, and demographic variables of age, teaching experience, and program experience, show varying relationships to pupil behavior and/or pupil product outcomes relative to the subjects investigated. Although findings regarding teachers' impact upon students in the classroom are inconsistent, they warrant consideration of teacher characteristics as relevant dimensions to study when examining classroom functioning.

CHAPTER III

PRESENTATION OF THE DATA

The purpose of this study was to examine the relationship between selected teacher characteristics and classroom parent participation in an early childhood program that had established parent participation as an integral component of its curriculum.

The Florida Model of Follow Through

The Florida Model of Follow Through, also known as the Florida Parent Education Follow Through Program, is one of approximately ten program variations of a federally funded compensatory education program, Project Follow Through (Maccoby & Zellner, 1970). Whereas Project Head Start provided disadvantaged children with short-term educational opportunities, Project Follow Through expanded the scope of its program to encompass kindergarten through third grade. It was designed to fulfill two primary goals.

1. To provide a comprehensive educational program for young children that is of continuous duration in order to

sustain early gains or in order to increase the probability of long-term benefits.

2. To examine the effectiveness of program models that espouse varying educational philosophies and teaching strategies (pp. 4-5).

Professional educators and/or psychologists associated with a university or a professional research organization were invited to submit a clearly delineated model for federal approval and subsequent selection by school communities throughout the United States (Maccoby & Zellner, 1970). This was the means by which the University of Florida's Institute for Development of Human Resources (IDHR) became a Follow Through sponsor.

The IDHR, under the directorship of Ira Gordon, had previously developed extensive research efforts in infant stimulation through parent education. The philosophical orientation toward parental involvement in the child's education transcended from the infant and toddler studies into the development of a model for Project Follow Through.

The Florida Model of Follow Through operates under the philosophy that "a sound educational program for young children needs to work in the home and in the school" (Gordon, 1972, p. 2). The in-school component of the Florida Model does not prescribe specific curriculum content or implementation techniques, but as Gordon, Greenwood, Ware, and Olmstead (1974) point out:

> /IT/ provides ways of changing the classroom organization, teaching patterns and influencing the curriculum in a Follow Through classroom through (1) use of paraprofessionals; (2) the development, by the teaching team (teachers and paraprofessionals), of appropriate home learning activities growing out of the classroom program, and the parents' desires and needs; and (3) parental involvement. (p. 2)

Parental involvement through parent participation in the educational program is an integral component of this Model. The developers of the Model operate under the assumption that parents are adequate, are concerned about their children, and desire optimal educational opportunities for their children (Gordon, 1972). The Florida Model of Follow Through was designed to enhance the capabilities of parents as teachers of their own children through parent participation in the educational program (Gordon, 1972; Gordon et al., 1974). Parent participation in the model acknowledges parents as partners in their children's education and involves them in a variety of roles, such as (a) paraprofessional parent educators, (b) teachers of their own children at home, (c) decision-makers in program policies, and (d) participants in the classroom. It was this final aspect, classroom parent participation, that was of concern in this research effort.

Description of the Sample

The sample in the study consisted of an intact population

of Florida Model of Follow Through teachers (N=60) who taught kindergarten, first, second, or third grade in a Department of Health, Education, and Welfare district in the southeastern United States during the 1974-75 academic year. Two distinct school districts were included in this study. District A was situated in a large, urban school system throughout which 10 Follow Through schools were widely dispersed. The Follow Through classrooms in District B were located partially in a rural, agricultural community with a larger proportion of the classrooms located in schools in a medium-sized urban area.

All 60 subjects were female teachers approximately equally representative of black and white racial heritage. Each classroom was assigned two paraprofessional parent educators, except for six classrooms in which only one parent educator had been assigned. The paraprofessional parent educators were female except for one male parent educator.

Although Follow Through classrooms are typically populated by disadvantaged children, the Florida Model specifically required that the Follow Through classrooms contain children of similar proportions of socioeconomic background as were present in the non-Follow Through grades in the school. Within the Follow Through classrooms were qualified and nonqualified Follow Through children. Only the qualified children received the comprehensive medical, dental, and welfare services. All

children participated equally in the educational program. Generally, the Follow Through schools were attended by children of lower to lower middle socioeconomic life style.

The findings from this study may be generalized beyond this sample based on the "grounds of opinion or authority, but it is important to realize that said generalizations are opinion and not statistical inferences" (Walberg, 1971, p. 76).

Design of the Study

This was a correlational study designed to examine the degree and significance of the relationship between teacher characteristics and parent participation in the classroom. Systematic observation was one method of gathering data for this project. Secondly, demographic information was obtained from staff persons in the respective school districts. Finally, data pertaining to classroom parent participation were obtained from the Institute for Development of Human Resources at the University of Florida, sponsor of the Florida Model of Follow Through.

Instrumentation

The primary source of data collection was through the administration of the Florida Climate and Control System (FLACCS). The FLACCS is a systematic observation instrument used to

describe teacher behavior in structuring the classroom climate and control of the pupils. In a study of reliability of the FLACCS, Ragosta (1974) reported "unadjusted intra-observer reliabilities range from coefficients of .62 to .86 for FLACCS factors . . . unadjusted inter-rater reliabilities range from coefficients of .38 to .70 for FLACCS factors" (p. 30). Regarding the validity of the FLACCS, Soar and Soar (1975) report that:

> FLACCS has shown highly significant discrimination between programs for which classroom behavior would be expected to differ; but more importantly, it has shown both linear relations with pupil gain and interactions with pupil characteristics in relation to gain. (p. 3)

The Institute for Development of Human Resources provided a second source of data. Classroom parent participation was obtained from computer print-outs of the Parent Educator Weekly Home Visit Report (PEWR). The PEWR is an instrument utilized to gather data from parents of children in Florida Model of Follow Through classrooms. Parent educators collected the information for the PEWR and submitted it to the Institute for tabulation. The PEWR item pertaining to classroom parent participation was Item 51 which determines if Mom volunteers in the classroom (during the week): yes or no.

A third source of data were records kept by project specialists in each school district. This provided information

regarding average classroom enrollment, years of Follow Through teaching experience, and total years of teaching experience. Information that was missing was acquired through direct interview with the teacher(s).

Explanation of the Data

Two separate data analyses were performed. Data Analysis I utilized variables consisting of derived-scores from specified sections of the FLACCS, as indicated in Table 1. Data Analysis II incorporated variables derived from the FLACCS factor structure (Soar, 1973). Since this was an exploratory study, these separate analyses were undertaken to examine the meaningfulness of the two sets of variables as well as their statistical significance.

For Data Analysis I the FLACCS observation data were converted to a numerical score using a scheme devised by Soar and Soar.[1] The scheme consists of rating each item in the two categories that comprise Teacher Control so as to reflect the degree of teacher control ranging from gentle control as Level 1 to strong, coercive control as Level 5.

Utilizing the scheme developed by Soar and Soar, a weighted

---

[1]In a personal interview with Dr. Soar at the Institute for Development of Human Resources, Gainesville, Florida, August, 1975.

score was obtained for the category of teacher verbal control and for the category of teacher nonverbal control by means of the following procedure: (a) each item was identified by its assigned level of control; (b) the level of control was multiplied by the number of instances that particular item was observed. Thus, a weighted score was derived for every item in each category. The sum of the weighted scores for every item in each category yielded the category derived-score. The category derived-scores were utilized in Data Analysis I procedures.

Table 1

Data Analysis I Independent Variables Relative to Teacher Behavior

Variable Descriptor	FLACCS Items
Teacher Verbal Control	Teacher Items 20-39
Teacher Nonverbal Control	Teacher Items 40-59
Teacher Positive Affect	Teacher Verbal Positive Affect Items 31-38 Teacher Nonverbal Positive Affect Items 29-36
Teacher Negative Affect	Teacher Verbal Negative Affect Items 10-16 Teacher Nonverbal Negative Affect Items 10-16

A teacher positive affect derived-score was obtained by combining the total number of observations of teacher verbal positive affect and teacher nonverbal positive affect. Each incident of teacher positive affect, both verbal and nonverbal, was assigned a value of one. The sum of the observed incidences of teacher positive affect was combined to form the teacher positive affect derived-score. Teacher negative affect derived-scores were calculated in a similar manner.

Data Analysis II utilized variables derived from the FLACCS factor structure determined by Soar (1973) in a factor analytic study of the instrument. The rotated factors, with the respective factor loadings, FLACCS variables, and FLACCS item numbers are listed in Table 2.

Items with similar factor loadings were collapsed to form a single variable. However, Soar (see Footnote 1) cautioned that verbal and nonverbal control should not be combined due to the fact that each seemed to account for distinctly different types of teacher behavior. The variables relative to teacher behavior for Data Analysis II are listed in Table 3.

Both Data Analyses I and II incorporated teacher behavior variables, teacher demographic characteristics, and average classroom enrollment. Each set of independent variables was analyzed against classroom parent participation as the dependent measure. Summary charts of the raw data for Data Analyses

Table 2

Data Analysis II Variables from FLACCS Factor Structure

Factor Loadings	FLACCS Variables	FLACCS Items
Factor 1: Strong Control		
.89	Total Teacher Negative Affect	Affect Items 10-16, verbal and nonverbal
.87	Teacher Verbal Control, Level 5	Items 35, 36, 37
.82	Teacher Verbal Control, Level 4	Items 32, 33, 34, 38
.62	Teacher Verbal Control, Level 3	Items 27, 28, 29, 30, 31
.59	Teacher Nonverbal Control, Level 3	Items 49, 50, 51
Factor 3: Teacher-Pupil Supportive Behavior		
.44	Teacher Verbal Control, Level 1	Items 20, 21, 22, 23
Factor 4: Nonverbal Gentle Control		
.65	Teacher Nonverbal Control, Level 2	Items 41, 45, 46, 47
Factor 5: Gentle Control		
.79	Teacher Verbal Control, Level 2	Items 24, 25, 26
.65	Teacher Nonverbal Control, Level 1	Items 42, 43, 44
Factor 9: Teacher Positive Affect		
.78	Total Teacher Positive Affect	Verbal Items 31-38 Nonverbal Items 29-36

Note. From Soar, 1973.

Table 3

Data Analysis II Independent Variables Relative to Teacher Behavior

Variable Descriptor	FLACCS Items
Strong Teacher Control	Teacher Items 32-38 Verbal Negative Affect Items 10-16 Nonverbal Negative Affect Items 10-16
Medium Teacher Verbal Control	Teacher Items 27-31
Medium Teacher Nonverbal Control	Teacher Items 49-51
Level 1, Teacher Verbal Control	Teacher Items 20-23
Level 2, Teacher Nonverbal Control	Teacher Items 41, 45-47
Level 2, Teacher Verbal Control	Teacher Items 24-26
Level 1, Teacher Nonverbal Control	Teacher Items 42-44
Teacher Positive Affect	Verbal Affect Items 31-38 Nonverbal Affect Items 29-36

I and II are presented in Appendix C. Finally, the raw score data were keypunched and verified on IBM computer cards in preparation for statistical analysis.

CHAPTER IV

ANALYSIS OF THE DATA

The findings relative to the relationship between teacher characteristics and classroom parent participation in the Florida Model of Follow Through are reported in this chapter. Data Analysis I was designed to test the statistical significance of Null Hypothesis I; and Data Analysis II served as a test for the statistical significance of Null Hypothesis II. The nature of the data, multiple independent variables, and the nature of the sample, an intact population, necessitated the use of a statistical technique whose assumptions would not be violated by these given circumstances. Additionally, as an exploratory study, it was the intent of this endeavor to ascertain which combination of independent variables within Data Analysis I or within Data Analysis II would provide the most optimal solution for the regression of the dependent variable. Multiple regression analysis with stepwise procedures fulfilled the stated criteria and, subsequently, was selected as the appropriate data analysis procedure. Specifically Biomedical Computer Program BMD 02R (Dixon, 1973) was selected to perform the stepwise regression analyses.

Data Analysis I

Data Analysis I was designed to test the following null hypothesis:

> Hypothesis I. When the predictor variables of teacher behavior as measured by the Florida Climate and Control System - Data Analysis I variables, teacher demographic characteristics of years of teaching experience and years of teaching in the Florida Model of Follow Through, and average classroom enrollment are combined in a regression equation, they do not account for a significant amount of variation in classroom parent participation as indicated by tabulations of the "YES" responses to Item 51 on the Parent Educator Weekly Home Visit Report--"Did Mom work in the class last week?"

This analysis examined the linear regression of the criterion measure of classroom parent participation on the predictor variables of teacher verbal control, teacher nonverbal control, teacher positive affect, teacher negative affect, Follow Through years of teaching, total years of teaching experience, and average classroom enrollment. The independent variables relative to teacher behavior were obtained by use of derived-score formula that reflected the level of control and the number of instances those particular behaviors were observed.

Examination of the correlation matrix of the linear variables in Table 4 indicated that there were no significant correlations ($p < .05$) between the dependent variable and any of the independent variables. It appeared that, taken singularly,

Table 4

Correlation Matrix of Linear Variables Used in Stepwise Regression Analysis - Data Analysis I

Variable[a]	DEPVAR	TCHVER	TCHNVE	POSAFC	NEGAFC	FTHTCH	YRSTCH	AVENRL
DEPVAR	1.000	-.080	-.132	-.041	-.073	.085	.111	.165
TCHVER		1.000	.206	-.442	.799	-.095	-.080	-.185
TCHNVE			1.000	-.026	.303	-.028	-.029	-.106
POSAFC				1.000	-.581	.092	-.054	.201
NEGAFC					1.000	-.049	-.007	-.330
FTHTCH						1.000	.163	.053
YRSTCH							1.000	.033
AVENRL								1.000

Note. N=60

[a]DEPVAR=Dependent Variable of Classroom Parent Participation; TCHVER=Teacher Verbal Control; TCHNVE=Teacher Nonverbal Control; POSAFC=Teacher Positive Affect; NEGAFC=Teacher Negative Affect; FTHTCH=Follow Through Years Teaching; YRSTCH=Total Years Teaching; AVENRL=Average Classroom Enrollment.

*$p < .05$

the teacher behavior variables under study, the teacher demographic variables, and average classroom enrollment were not significantly related to classroom parent participation.

Stepwise regression analysis of the data, summarized in Table 5, indicated that six of the seven predictor variables had sufficient F values to enter and, therefore, were entered into the regression equation. The proportion of variance in classroom parent participation accounted for by the single variable, average classroom enrollment, was $R^2 = .0272$ ($R = .1648$) and it was not significant ($F = 1.620$; $p < .05$; $df = 1,58$). The single variable, average classroom enrollment was not a statistically significant predictor of classroom parent participation. With the inclusion of the additional five variables that had sufficient F values to enter, the variance increased to $R^2 = .0658$ ($R = .2565$), which does not constitue a statistically significant proportion of the variance in the criterion measure. The regression of classroom parent participation cannot be significantly predicted by Data Analysis I linear variables.

Walberg (1971) cautioned that educators tend to focus on linear relationships at the risk of overlooking important information relative to nonlinear relationships. The variables from Data Analysis I were further examined for potential nonlinear relationships. The independent variables were squared

Table 5

Summary of Stepwise Regression Analysis for Data Analysis I
Linear Variables

Step Number	Variable Entered	Removed	Multiple R	RSQ	Increase in RSQ	F Ratio[a]
1	Average Classroom Enrollment		.1648	.0272	.0272	1.620
2	Teacher Nonverbal Control		.2010	.0404	.0732	1.200
3	Total Years Teaching		.2260	.0511	.0107	1.004
4	Follow Through Years Teaching		.2378	.0566	.0055	.824
5	Teacher Positive Affect		.2508	.0629	.0063	.725
6	Teacher Verbal Control		.2565	.0658	.0029	.622

Note. N=60
[a]The F ratio for the multiple R at each step.
*p <.05

by transgenerations to form quadratic variables. This new set of variables was entered into a stepwise regression analysis. The correlations among these independent variables and the dependent variable is shown in Table 6. There were no significant correlations ($p < .05$) between classroom parent participation and the nonlinear independent variables. However, the correlation between the quadratic form of total years of teaching and classroom parent participation approached significance. This could be construed to indicate that beginning teachers or more experienced teachers, or both, tended to have more classroom parent participation than did those teachers nearer the mean. It should be remembered that this relation only approached significance.

Summarization of the stepwise regression analysis utilizing the nonlinear or quadratic form of the variables is presented in Table 7. All seven quadratic variables, when entered into a quadratic regression equation, did not account for a significant proportion of the variance in the criterion measure, classroom parent participation. It should be mentioned that the amount of variance accounted for by the nonlinear variables, $R^2 = .1005$ ($R = .3170$) reflects a 3.4% increase over the variance accounted for by the linear variables, though neither percent is statistically significant.

Therefore, Data Analysis I with linear variables or Data

Table 6

Correlation Matrix of Nonlinear Variables Used in Stepwise Regression Analysis - Data Analysis I

Variable[a]	DEPVAR	TCHVER	TCHNVE	POSAFC	NEGAFC	FTHTCH	YRSTCH	AVENRL
DEPVAR	1.000	-.102	-.120	-.002	-.048	.054	.201	.159
TCHVER		1.000	.163	-.362	.840	-.010	-.059	-.205
TCHNVE			1.000	-.010	.353	.026	-.023	-.161
POSAFC				1.000	-.367	.078	-.071	.270
NEGAFC					1.000	-.003	-.042	-.297
FTHTCH						1.000	.011	-.057
YRSTCH							1.000	.048
AVENRL								1.000

Note. N=60

[a]DEPVAR=Dependent Variable of Classroom Parent Participation; TCHVER=Teacher Verbal Control; TCHNVE=Teacher Nonverbal Control; POSAFC=Teacher Positive Affect; NEGAFC=Teacher Negative Affect; FTHTCH=Follow Through Years Teaching; YRSTCH=Total Years Teaching; AVENRL=Average Classroom Enrollment.

*$p < .05$

Table 7

Summary of Stepwise Regression Analysis for Data Analysis I
Nonlinear Variables

Step Number	Variable[a] Entered	Removed	Multiple R	RSQ	Increase in RSQ	F Ratio[b]
1	Total Years Teaching		.2010	.0404	.0404	2.441
2	Average Classroom Enrollment		.2504	.0627	.0223	1.907
3	Teacher Nonverbal Control		.2672	.0714	.0087	1.435
4	Follow Through Years Teaching		.2743	.0752	.0038	1.119
5	Teacher Verbal Control		.2785	.0776	.0023	.908
6	Teacher Negative Affect		.3150	.0992	.0216	.973
7	Teacher Positive Affect		.3170	.1005	.0013	.830

Note. N=60
[a]Nonlinear variable originated from the square of each linear variable.
[b]The F ratio is for the multiple R at each step.
*p< .05

Analysis I with nonlinear or quadratic variables, did not provide support for the rejection of Null Hypothesis I. Inspection of the results presented in Table 5 and Table 7 indicated that the variables of teacher verbal control, teacher nonverbal control, teacher positive affect, teacher negative affect, Follow Through years of teaching, total years teaching, and average classroom enrollment were not statistically significant predictors of classroom parent participation.

One of the inherent difficulties with Data Analysis I was that the derived-score method may not have adequately discriminated between teachers' level of control in their verbal and nonverbal behavior. For example, consider the variable, teacher verbal control. It is possible that a given subject exhibited 3 incidences of Level 5 behavior (coercive) and would, therefore, receive a derived score of 15 for teacher verbal control. Another subject, for the teacher verbal control items, demonstrated 5 incidences of Level 1 behavior (gentle) and 5 incidences of Level 2 behavior. The resultant derived-score for the second subject would also be 15. Though behaviorally different, they were numerically equivalent. A more effective system was needed in order to determine teacher behavior scores that would be more discriminative between subjects, therefore, Data Analysis II derived its variables from the factor structure of the FLACCS (Soar, 1973).

Data Analysis II

Data Analysis II was designed to test the following null hypothesis:

> Hypothesis II. When the predictor variables of teacher behavior as measured by the Florida Climate and Control System - Data Analysis II variables, teacher demographic characteristics of years of teaching experience and years of teaching in the Florida Model of Follow Through, and average classroom enrollment are combined in a regression equation, they do not account for a significant amount of variation in classroom parent participation as indicated by tabulations of the "YES" responses to Item 51 on the Parent Educator Weekly Home Visit Report--"Did Mom work in the class last week?"

Data Analysis II involved an examination of both the linear regression and the nonlinear regression of the criterion measure, classroom parent participation, on the predictor measures of teacher behavior, teacher demographic characteristics, and average classroom enrollment. The predictor variables for teacher behavior were derived from the FLACCS factor structure as indicated in Table 2. Items having similar factor loadings were clustered to form the teacher behavior predictor variables utilized in these analyses (see Table 3).

The correlation matrix of the linear predictor variables with the criterion measure can be found in Table 8. There were no significant ($p < .05$) correlations evidenced by any of

Table 8

Correlation Matrix of Linear Variables Used in Stepwise Regression Analysis - Data Analysis II

Variable[a]	DEPVAR	STRCON	MEDVER	MEDNVE	ONEVER
DEPVAR	1.000	-.078	-.072	-.077	..056
STRCON		1.000	.454	.032	.056
MEDVER			1.000	.144	.063
MEDNVE				1.000	.056
ONEVER					1.000
TWONVE					
TWOVER					
ONENVE					
POSAFC					
FTHTCH					
YRSTCH					
AVENRL					

Note. N=60

[a]DEPVAR=Dependent Variable of Classroom Parent Participation; STRCON=Strong Teacher Control; MEDVER=Medium Teacher Verbal Control; MEDNVE=Medium Teacher Nonverbal Control; ONEVER=Level 1, Teacher Verbal Control; TWONVE=Level 2, Teacher Nonverbal Control; TWOVER=Level 2, Teacher Verbal Control; ONENVE=Level 1, Teacher Nonverbal Control; POSAFC=Teacher Positive Affect; FTHTCH=Follow Through Years Teaching; YRSTCH=Total Years Teaching; AVENRL=Average Classroom Enrollment.

*$p < .05$

Table 8 - Extended

TWONVE	TWOVER	ONENVE	POSAFC	FTHTCH	YRSTCH	AVENRL
-.061	.042	-.006	-.041	.085	.111	.165
.145	.043	-.342	-.573	-.049	.005	-.321
.221	.034	-.309	-.315	-.105	-.096	-.029
-.106	-.008	.006	-.105	-.135	-.174	-.171
.069	.138	.349	.279	-.019	-.061	.079
1.000	-.063	-.047	-.039	.109	.073	-.073
	1.000	.103	.062	-.071	-.245	.123
		1.000	.540	-.034	.075	.238
			1.000	.091	-.053	.202
				1.000	.163	-.053
					1.000	.033
						1.000

the 11 predictor variables with the criterion measure, classroom parent participation.

A summary of the stepwise regression analysis of the linear variables for Data Analysis II, as presented in Table 9, indicated that when all 11 predictor variables are combined in a linear regression equation, they account for only 8.09% of the variance in classroom parent participation. An analysis of variance at each of the 11 steps indicated that the F ratios for the multiple R's were not statistically significant. In conclusion, it appeared that the Data Analysis II independent variables of strong teacher control; medium teacher verbal control; medium teacher nonverbal control; Level 1, teacher verbal control; Level 2, teacher nonverbal control; Level 2, teacher verbal control; Level 1, teacher nonverbal control; teacher positive affect; Follow Through years teaching; total years teaching; and average classroom enrollment were not singularly, or in combination, statistically significant predictors of the linear regression of classroom parent participation for the subjects in this study.

To check for the existence of nonlinear relationships, Data Analysis II predictor variables were transgenerated to form quadratic variables which were subsequently entered into a stepwise regression analysis. The correlation matrix of these nonlinear variables with the criterion measure is presented

Table 9

Summary of Stepwise Regression Analysis for Data Analysis II
Linear Variables

Step Number	Variable Entered	Variable Removed	Multiple R	Multiple RSQ	Increase in RSQ	F Ratio[a]
1	Average Classroom Enrollment		.1648	.0272	.0272	1.620
2	Total Years Teaching		.1961	.0384	.0113	1.139
3	Follow Through Years Teaching		.2108	.0445	.0060	.868
4	Teacher Positive Affect		.2254	.0508	.0063	.736
5	Medium Teacher Verbal Control		.2391	.0572	.0064	.655
6	Level 1, Teacher Verbal Control		.2547	.0649	.0077	.613
7	Strong Teacher Control		.2663	.0709	.0061	.567

8	Level 2, Teacher Verbal Control	.2720	.0740	.0030	.509
9	Level 1, Teacher Nonverbal Control	.2778	.0772	.0032	.465
10	Level 2, Teacher Nonverbal Control	.2819	.0795	.0023	.423
11	Medium Teacher Nonverbal Control	.2844	.0809	.0014	.384

Note. N=60
[a]The F ratio for the multiple R at each step.
*$p < .05$

in Table 10. Examination of the correlation coefficients indicated that there were no statistically significant ($p < .05$) correlations between classroom parent participation and the quadratic independent variables. However, as in nonlinear Data Analysis I, the variable total years teaching approached a significant correlation with classroom parent participation.

The stepwise regression analysis utilizing nonlinear Data Analysis II variables is summarized in Table 11. All 11 predictor measures had adequate F values to enter and, consequently, were entered into a regression equation. The multiple R^2, with the inclusion of all 11 predictor variables, was .1028 ($R = .3207$) which does not constitute a statistically significant ($p < .05$, $df = 11,48$) amount of the variance in classroom parent participation. The nonlinear solution, as evidenced in Data Analysis I, does account for an increased proportion of variance in the criterion measure than did the linear solution. However, the nonlinear or quadratic predictor variables utilized in Data Analysis II were not significant in predicting the regression of classroom parent participation for the subjects in this study.

The findings of Data Analysis II, whether considering a linear solution or a nonlinear solution, did not provide support for the rejection of Null Hypothesis II.

In summary, analysis of the data from this study did not

Table 10

Correlation Matrix of Nonlinear Variables Used in Stepwise Regression Analysis - Data Analysis II

Variable[a]	DEPVAR	STRCON	MEDVER	MEDNVE	ONEVER
DEPVAR	1.000	-.070	-.114	-.118	.023
STRCON		1.000	.405	.053	-.009
MEDVER			1.000	.122	.027
MEDNVE				1.000	.021
ONEVER					1.000
TWONVE					
TWOVER					
ONENVE					
POSAFC					
FTHTCH					
YRSTCH					
AVENRL					

Note. N=69

[a]DEPVAR=Dependent Variable of Classroom Parent Participation; STRCON=Strong Teacher Control; MEDVER=Medium Teacher Verbal Control; MEDNVE=Medium Teacher Nonverbal Control; ONEVER=Level 1, Teacher Verbal Control; TWONVE=Level 2, Teacher Nonverbal Control; TWOVER=Level 2, Teacher Verbal Control; ONENVE=Level 1, Teacher Nonverbal Control; POSAFC=Teacher Positive Affect; FTHTCH=Follow Through Years Teaching; YRSTCH=Total Years Teaching; AVENRL=Average Classroom Enrollment.

*$p < .05$

Table 10 - Extended

TWONVE	TWOVER	ONENVE	POSAFC	FTHTCH	YRSTCH	AVENRL
-.085	.080	-.013	-.003	.054	.201	.159
.077	.079	-.199	-.360	.021	-.019	-.280
.191	-.022	-.266	-.329	-.086	-.075	-.019
-.110	.016	.098	-.101	-.139	-.169	-.163
-.064	.149	.491	.292	-.035	-.033	.102
1.000	-.087	-.091	-.102	.144	.027	-.126
	1.000	089	-.014	.030	-.235	.090
		1.000	.551	.017	-.013	.254
			1.000	.078	-.071	.270
				1.000	.011	-.057
					1.000	.048
						1.000

Table 11

Summary of Stepwise Regression Analysis for Data Analysis II
Nonlinear Variables

Step Number	Variable[a] Entered	Removed	Multiple R	RSQ	Increase in RSQ	F Ratio[b]
1	Total Years Teaching		.2010	.0404	.0404	2.441
2	Average Classroom Enrollment		.2504	.0627	.0223	1.907
3	Level 2, Teacher Verbal Control		.2758	.0761	.0134	1.537
4	Medium Teacher Verbal Control		.2909	.0846	.0086	1.272
5	Level 1, Teacher Nonverbal Control		.3033	.0920	.0073	1.094
6	Level 1, Teacher Verbal Control		.3078	.0947	.0027	.924
7	Follow Through Years Teaching		.3119	.0974	.0026	.801

8	Level 2, Teacher Nonverbal Control	.3165	.1002	.0029	.710
9	Medium Teacher Nonverbal Control	.3182	.1013	.0011	.626
10	Teacher Positive Affect	.3203	.1026	.0013	.560
11	Strong Teacher Control	.3207	.1028	.0002	.500

Note. N=60
[a]Nonlinear variable origins can be found in Table 10.
[b]The F ratio is for the multiple R at each step.
*$p < .05$

provide evidence to support the rejection of either Null Hypothesis I or II. It can, therefore, be concluded that for the subjects in this study the teacher behavior variables, the teacher demographic variables, and average classroom enrollment did not adequately explain the variations in classroom parent participation.

CHAPTER V

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Conclusions

The purpose of this study was to determine if teacher behavior, teacher demographic characteristics, and average classroom enrollment were related, singularly or in combination, to the amount of classroom parent participation in Districts A and B of the Florida Model of Follow Through. This study was concerned with determining whether there was a relationship between the way teachers behaved in controlling students in the classroom and the amount of parent participation in the classroom.

Multiple regression analysis resulted in failure to reject the following null hypotheses:

> Hypothesis I. When the predictor variables of teacher behavior as measured by the Florida Climate and Control System - Data Analysis I variables, teacher demographic characteristics of years of teaching experience and years of teaching in the Florida Model of Follow Through, and average classroom enrollment are combined in a regression equation, they do not account for a significant amount of variation in classroom parent participation as indicated by tabulations of the "YES" responses to Item 51

on the Parent Educator Weekly Home Visit Report--"Did Mom work in the class last week?"

Hypothesis II. When the predictor variables of teacher behavior as measured by the Florida Climate and Control System - Data Analysis II variables, teacher demographic characteristics of years of teaching experience and years of teaching in the Florida Model of Follow Through, and average classroom enrollment are combined in a regression equation, they do not account for a significant amount of variation in classroom parent participation as indicated by tabulations of the "YES" responses to Item 51 on the Parent Educator Weekly Home Visit Report--"Did Mom work in the class last week?"

For the subjects in the Florida Model of Follow Through Districts A and B during the 1974-75 academic year, the predictor variables of teacher behavior, teacher demographic characteristics, and average classroom enrollment did not account for a significant proportion of the variance in classroom parent participation. Statistically there appeared to be other unidentified variables that would be more significant in explaining the variation in classroom parent participation.

Implications

This study sought to determine whether or not the classroom teacher would influence the amount of parent participation in the classroom, and this theory might possibly be substantiated in part. The teacher may influence the parents once they have arrived in the classroom. The critical point for

discussion is "What, or who, brought the parents to the classroom?" As a matter of general procedure, the paraprofessional parent educators in the Florida Model serve as liaisons between the home and the school and, as such, may serve in a very critical capacity. Irrespective of the teachers' preferences relative to classroom parent participation, what is actually conveyed to parents by parent educators regarding their in-school involvement may be more influential than the teacher.

A particular implication emerges from this study, namely, that there could be several key individuals whose contact with parents prior to their entrance into the classroom may be critical. In addition to parent educators' potential influence, the school administrators may be instrumental in extending their attitudes and/or behaviors to parents in an effort to effect classroom parent participation. School administrators who serve in the capacity to retain or dismiss the parent educators could conceivably impart their ideas on classroom parent participation to parent educators for implementation. Further research into this area might hypothesize ways in which parent educators and/or school administrators might effect classroom parent participation.

This study measured teacher controlling behavior relative to interactions with children. Although these behaviors did not relate to classroom parent participation in the present

study, it might be that other teacher behaviors, specifically behaviors directed toward parents, could be related to classroom parent participation. What does a teacher convey to parents about their role in the classroom? Is the teacher helpful in orienting parents to the classroom by listing possible involvement activities for parents to review and select? Or are the parents quickly ushered to a chair in the back of the classroom and instructed to sit as long as they wish? Therefore, teacher behaviors other than those incorporated in this study could be relevant to classroom parent participation.

The Florida Model of Follow Through involves parents, not only as classroom volunteers and paraprofessional parent educators, but also as participants in Policy Advisory Committee (PAC) meetings and activities and in the crucial role of teachers of their own children at home. It is possible that these involvement options enable parents to select roles in which to engage other than that of classroom participant. Examination of only one aspect of parent participation that is existant in the Florida Model could limit the findings.

Additionally, parents may select involvement options other than that of classroom participant for practical reasons. Namely, a parent may be unable to participate in the classroom due to younger children in the home, lack of transportation,

or daytime employment. It is possible that, regardless of any individual's behavior toward parents, these practical considerations may be paramount in determining the availability of a parent for classroom participation. Individuals who are concerned with the amount of classroom parent participation should probably first ascertain the number of parents who are available to participate, then examine the percentage of available parents who actually do participate in the classroom.

Emerging from the current study of variations in total amounts of classroom participation is an implication that it might be more meaningful to study patterns of classroom parent participation. Classroom parent participation occurred with greater frequency at different points throughout the year. Holidays may have engendered increased interest in classroom participation. Or, do parents become involved in classrooms in an effort to determine the teachers' capabilities in dealing with their children? A parent may decide to volunteer in the classroom after his/her child begins to have difficulties with the learning environment. What variables, or combinations of variables, are related to patterns of classroom participation? Might some patterns of classroom parent participation be qualitatively different from other patterns? Persons interested in classroom parent participation may be well advised to examine its existant patterns.

In summary, implications that emerged from this study are (a) individuals other than the classroom teacher have contact with parents and, therefore, may influence classroom participation; (b) teacher behaviors not studied in this research effort may be related to classroom parent participation; (c) parent involvement options may reduce the amount of classroom parent participation; (d) logistic considerations, such as younger children in the home, lack of transportation, and daytime employment may serve as limitations to classroom participation by parents; (e) rather than examining variations in total instances of classroom parent participation, it might be more meaningful to consider the percentage of parents available per classroom or the pattern of participation per classroom.

Recommendations

Based on the conclusions from this study, several recommendations are offered for consideration in future research relative to classroom parent participation in the Florida Model of Follow Through. The first recommendation is that the study should be replicated utilizing a substantially larger sample than the one in the present study (N=60). Secondly, since it is possible that some sites of the Florida Model of Follow Through comply to a greater extent with the philosophical

orientation of the Model, the sample should be randomly selected from all Florida Model classrooms.

The Florida Model's philosophy relative to parent involvement in the educational program is equally applicable and expected at all levels, kindergarten through third grade. However, it may be that the amount or the nature of parent participation may vary with the grade level or with the length of the parents' experience in the program. Therefore, it should be studied as an independent variable or it should be controlled in further research.

A final recommendation would be to devise a procedure for acquiring a measure of classroom parent participation that would attempt to eliminate, as much as possible, the inherent weaknesses in self-report data. One source of classroom parent participation had to be disregarded in the present study due to its questionable accuracy. Even with the change in source of data, the accuracy of the measure of classroom parent participation from one district was tenuously accepted with the realization that it may have biased potential results of this study. The problem could be the consequence of a lack of understanding rather than intentional inflation but, nevertheless, it is a situation that should be remediated prior to additional research in the area.

In summary, it is recommended that further research aimed

at explaining significant proportions of variance in classroom parent participation should (a) utilize a large sample, randomly selected from all Florida Model of Follow Through districts; (b) consider improving the method of obtaining a measure of classroom parent participation; and (c) consider grade level as an independent or controlled variable for the subjects in the study.

APPENDIX A

CLASSROOM PARENT PARTICIPATION MEASURE

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR)

1974-1975 School Year

THIS WEEK's VISIT

(This Booklet to be retained by parent educator)

Col. 21 How many times was the visit attempted this week?
1. one
2. two
3. three or more
4. not attempted

Col. 22 The visit was:
1. completed
Not completed because:
2. it was cancelled by mothering one with no reason given
3. it was cancelled by mothering one with reason given
4. it was cancelled by PE with reason given
5. mothering one refuses participation in the Florida Model
6. other (weather, car broke, death, school holiday, etc.)

Col. 23 With whom was the visit made?
1. mother
2. father
3. other adult
4. brother or sister
5. other minor

Co. 24 During the home visit, the mothering one:
1. made me feel comfortable (smiled, talked openly, etc.)
2. went about the visit in a business-like way (cooperated...answered questions, did the task, etc.)
3. would not cooperate (did not answer questions, would not pay attention, was busy with other things)

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR) - continued

Col. 25 During the visit the Follow Through child was:
1. available and was taught the task
2. available and was not taught the task
3. not available

Col. 26 During the visit were there disturbances in the room such as other adults, loud TV, crying baby, etc.?
1. yes
2. no

Cols. 27, 28, 29, and 30
Which main task was presented (or re-presented) today? Place the four digit task number in Cols. 27, 28, 29, and 30. If you present task 0006 mark) in Col. 27, 0 in Col. 28, 0 in Col. 29, and 6 in Col. 30. If no main task was presented, then columns 27 through 36 should be filled in with 0's.

Col. 31 This week's task was developed by:
1. University of Florida
2. school
3. a parent
4. other

Col. 32 How did you present the main task?
1. told her
2. told her and showed her
3. told her, showed her, and had her tell me in her own words
4. told her, showed her, and did it together

Col. 33 How did the mothering one react to your instructions for the main task?
1. interested - reacted positively (nodded, smiled, asked questions, etc.)
2. neutral - listened but showed little positive or negative response
3. disinterested - reacted negatively (frowned, objected, belittled)

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR) - continued

Col. 34 What kind of variations did the mothering one do when presenting task back?
1. presented it back exactly as it was presented
2. used different words in presenting task back
3. extended the task in presenting it back
4. did not present it to me

Col. 35 When you watched the mothering one teach the child the task:
1. the mothering one used all the DTB's which I stressed to her
2. the mothering one used some of the DTB's which I stressed to her
3. the mothering one used none of the DTB's which I stressed
4. the mothering one did not teach the task to the child

Col. 36 Did you adapt the task for this particular mother?
1. no - did it exactly as written
2. yes - after discussion with teacher
3. yes - after finding an unexpected situation or resource in the home
4. yes - after mothering one made suggestion during presentation

Cols. 37, 38, 39, and 40
Which main task was presented, re-presented, or simply left in the home last week? Place the four digit task number in Cols. 37, 38, 39, and 40. If you presented task 006 mark 0 in Col. 37, 0 in Col. 38, 0 in Col. 39 and 6 in Col. 40. If no main task was presented then columns 37 through 40 should be filled in with 0's.

Col. 41 Last week's task was:
1. attempted with the Follow Through child
2. not attempted with the Follow Trhough child
If 2 in Col. 41, then enter 0's in columns 42 through 48

Col. 42 Mothering one said that the child was _____ _____ in the task. Choose one to fill in the blank.
1. interested
2. not interested
3. this information not requested
4. this information requested but not given

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR)- continued

Col. 43 Mothering one said that the child was _____ _____ in the task. Choose one to fill in the blank.
1. successful
2. not successful
3. this information not requested
4. this information requested but not given

Col. 44 The mothering one said last week's task was:
1. important
2. of no importance
3. this information not requested
4. this information requested but not given

Col. 45 The mothering one stated that the last task was:
1. too difficult for the child
2. just right for the child
3. too easy for the child
4. this information not requested
5. this information requested but not given

Col. 46 Who presented last week's task to the Follow Through child?
1. mother
2. father
3. brother
4. sister
5. other
6. two or more of the above
7. information not available or no one presented the task

Col. 47 How much time during the past week did the mothering one spend teaching the task to the child in the home?
1. more than 3 hours
2. from 2 to 3 hours
3. from 1 to 2 hours
4. less than 1 hour
5. this information not requested
6. this information requested but not given

Col. 48 How much time did the mothering one say the child spent on the task last week after it was taught to him?
1. more than 3 hours
2. from 2 to 3 hours
3. from 1 to 2 hours
4. less than 1 hour
5. she did not say

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR) - continued

HOME-SCHOOL INFORMATION

Col. 49 How much time was spent with the teacher in planning this week's home visit to this particular home?
1. less than 15 minutes
2. 15 to 30 minutes
3. 31 to 45 minutes
4. over 45 minutes
5. there was no planning period

Col. 50 How much time was spent with the teacher in talking about this particular home visit afterwards?
1. less than 15 minutes
2. 15 to 30 minutes
3. 31 to 45 minutes
4. over 45 minutes
5. there was no follow-up conference

Col. 51 Did the mothering one work in the classroom last week?
1. yes
2. no
3. PE does not know

Col. 52 Were plans made for the mothering one to work in the classroom?
1. yes
2. no

Col. 53 Did the mothering one attend any parent group meeting at the school last week? (not counting PAC)
1. yes
2. no
3. PE does not know

Col. 54 Did the mothering one or any of the child's relatives attend the last PAC meeting?
1. yes
2. no
3. PE does not know

Col. 55 Did you discuss the last PAC meeting with the mothering one?
1. yes
2. no

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR) - continued

Col. 56 Did you tell the mothering one about the next PAC meeting?
1. yes
2. no

GENERAL INFORMATION

Col. 57 Were songs, nursery rhymes, toy making, rhythm games or other enrichment materials presented to the mothering one for any child in the family (not including the task or task materials).
1. yes
2. no

Col. 58 Did you discuss comprehensive services?
1. yes
2. no

Col. 59 Did you ask mothering one for suggestions for tasks?
1. yes
2. no

Col. 60 Were suggestions for tasks given to you? (Please write on a sheet of paper and give to your teacher.)
1. yes
2. no

Col. 61 Did you help the mothering one build a new task during the home visit?
1. yes
2. no

TEACHING BEHAVIOR

During the home visit did you both show and tell the mothering one how to:

Col. 62 Get the learner to ask questions?
1. yes
2. no

PARENT EDUCATOR WEEKLY HOME VISIT REPORT (PEWR) - continued

Col. 63 Ask questions that have more than one correct answer.
1. yes
2. no

Col. 64 Ask questions that require more than one word as an answer.
1. yes
2. no

Col. 65 Encourage the learner to enlarge upon his answer.
1. yes
2. no

Col. 66 Praise the learner when he does well or takes small steps in the right direction.
1. yes
2. no

Col. 67 Let the learner know when his answer or work is wrong, but do so in a positive or neutral way.
1. yes
2. no

Col. 68 Get the learner to make judgments on the basis of evidence rather than by quessing.
1. yes
2. no

Col. 69 During the activity give the learner time to think about the problem; don't be too quick to help.
1. yes
2. no

Col. 70 Before starting the activity, give the learner time to familiarize himself with the task materials.
1. yes
2. no

Col. 71 Before starting the activity, explain what you are going to do.
1. yes
2. no

Source. Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Florida 32611. Reprinted by permission.

APPENDIX B

CLASSROOM OBSERVATION INSTRUMENT

FLORIDA CLIMATE AND CONTROL SYSTEM (FLACCS)

by Robert S. Soar[a]

C. Tot 1 2 3	TEACHER	C. Tot 1 2 3	PUPIL
10	Teacher Central	10	Pupil Central
11	Leads singing, games, story tm	11	Pupil -- no choice
		12	Pupil -- limited choice
12	Moves freely among pupils	13	Pupil -- free choice
13	Withdraws from class		
14	Uses blackboard, A-V Equip	14	(*Seat work w/o teacher
15	Ignores, refuses to attend P	15	(*Seat work with teacher
16	Attends P briefly		
17	Attends P closely	16	(*Works, plays w much supv.
18	Attends P in succession	17	(*Works, plays w little supv.
19	Attends simultaneous activ.		
		18	(*Resists, disobeys directions
	VERBAL CONTROL	19	(*Obeys directions
20	Praises	20	Asks permission
21	Asks for status	21	Follow routine w/o reminder
22	Suggests, guides	22	Reports rule to another
23	Feedback, cites reason	23	Tattles
24	Questions for refltive. thot	24	Gives information
25	Correct w/o criticism (SM)	25	Gives direction
26	Questions for control	26	Gives reason
27	Questions states beh. rule	27	Speaks aloud w/o permission
28	Directs with reason	28	Engages in out-of-bounds beh.
29	Directs w/o reason	29	Parallel work or play
30	Uses time pressure	30	Work with socialization
31	Call child by name	31	Collab. work or play
32	Interrupts Pupil, cuts off	32	Works, plays competitive
33	Warns	33	Task related movement
34	Supv. P closely, imblizes.	34	Aimless wandering

C. Tot 1 2 3	TEACHER
35	Criticizes
36	Orders, commands
37	Scolds, punishes
38	Uses firm tone
39	Uses sharp tone
	NONVERBAL CONTROL
40	Tolerates deviant beh.
41	Positive redirection
42	Nods, smiles for control
43	Positive facial feedback
44	Uses "body English"
45	Gestures
46	Gives tangible reward
47	Touches, pats (gentle)
48	Holds, pushes, spanks (harsh)
49	Takes equipment, book
50	Signals, raps
51	Shhh! Shakes head
52	Glares, frowns

C. Tot 1 2 3	PUPIL
35	Fantasy
36	Uses play object as itself
37	Seeks reassurance, support
38	Shows pride
39	Shows fear, shame, humiliation
40	Shows apathy
	WORK GROUPS
41	Pupil as individual
42	Total group w teacher
43	Small group w teacher
44	Individual w teacher
45	Structured group(s) w/o T
46	Free groups
	SOCIALIZATION
47	Almost never
48	Occasionally
49	Frequently
	MATERIALS
50	Structure T behavior
51	Structure P behavior
	PUPIL INTEREST ATTENTION
52-53	(Rank 1 low to 5 high)

NEGATIVE AFFECT

C. Tot 1 2 3	Verbal
10	Says "stop it," etc.

Teacher	Nonverbal
C. Tot 1 2 3	
10	Waits for child

C. Tot 1 2 3		C. Tot 1 2 3	
11	Uses threatening tone	11	Frowns
12	Rejects child	12	Points, shakes finger
13	Criticizes, blames	13	Pushes or pulls, holds
14	Warns	14	Shows disgust
15	Yells	15	Takes material
16	Scolds, humiliates	16	Refused to respond to child
17	Other	17	Other
18	Code Involvement		

	Verbal	Pupil	Nonverbal
19	Says "No," "I won't" etc.	18	Makes face, frowns
20	Teases	19	Pouts, withdraws
21	Laughs	20	Uncooperative, resistant
22	Tattles	21	Stamps, throws, slams
23	Commands or demands	22	Interferes, threatens
24	Makes disparaging	23	Takes, damages property
25	Demands attention	24	Picks at child
26	Makes someone "feel small"	25	Pushes or pulls, holds
27	Finds fault	26	Hits, hurts
28	Threatens	27	Is left out
29	Other	28	Other
30	Code Involvement		

POSITIVE AFFECT

	Verbal	Teacher	Nonverbal
31	Says "Thank you" etc.	29	Accepts favors for self
32	Agrees with child	30	Waits for child
33	Supports child	31	Gives individual attention
34	Gives individual attention	32	Warm, congenial
35	Warm, congenial	33	Listens carefully to child

C. Tot 1 2 3		C. Tot 1 2 3	
36	Praises child	34	Smiles, laughs, nods
37	Develops "we feeling"	35	Pats, hugs, etc.
38	Is enthusiastic	36	Sympathetic
39	Other	37	Other
40	Code Involvement		

	Verbal	Pupil	Nonverbal
41	Says "Thank you," etc.	38	Helpful, shares
42	Sounds friendly	39	Leans close to another
43	Agrees with another	40	Chooses another
44	Initiates contact	41	Smiles, laughs with another
45	Offers to share, cooperate	42	Pats, hugs another
46	Supports another	43	Agreeable, cooperative
47	Is enthusiastic	44	Enthusiastic
48	Praises another	45	Horseplay
49	Helps another	46	Other
50	Other		
51	Code Involvement		

CODE INVOLVEMENT
0. None involved
1. Few involved
2. Up to ½ the class
3. More than half

Source. Institute for Development of Human Resources, College of Education, University of Florida, Gainesville, Florida 32611. Reprinted by permission.

[a]Copyright pending.

APPENDIX C

BASIC RAW SCORE DATA

Table C-1

Data Analysis I Variables

Ss	Dependent Variable of Classroom Parent Participation	Teacher Verbal Control	Teacher Nonverbal Control	Teacher Positive Affect	Teacher Negative Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
1	08	20	04	16	00	06	10	28
2	58	17	05	09	00	05	16	25
3	138	17	01	19	00	02	02	27
4	110	25	16	22	00	05	09	28
5	117	22	07	18	00	05	08	28
6	27	32	04	12	00	02	02	25
7	239	11	05	14	00	02	02	26
8	50	33	00	12	02	07	05	25
9	98	20	09	20	01	03	03	28
10	98	17	05	17	00	02	02	30
11	65	40	03	13	04	02	20	28
12	29	28	12	06	03	01	01	26
13	63	25	01	20	00	03	10	19
14	72	06	19	17	00	04	14	27
15	94	20	07	25	00	01	30	29
16	44	55	20	03	13	02	15	24

Table C-1 - continued

Ss	Dependent Variable of Classroom Parent Participation	Teacher Verbal Control	Teacher Nonverbal Control	Teacher Positive Affect	Teacher Negative Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
17	46	38	12	16	00	01	02	25
18	116	43	08	05	08	01	05	25
19	13	23	04	19	00	04	04	29
20	17	11	04	06	00	01	17	25
21	100	29	06	10	00	01	01	25
22	24	15	08	26	00	01	01	31
23	151	34	07	12	02	04	14	26
24	37	29	14	10	02	02	32	28
25	51	12	02	27	00	02	05	29
26	35	32	10	16	03	01	01	24
27	23	11	07	10	00	01	15	27
28	72	20	05	04	00	03	18	29
29	160	20	09	04	00	03	18	27
30	49	14	04	12	00	01	15	28
31	39	14	07	15	01	01	01	24
32	35	09	04	20	00	04	27	28
33	266	20	02	01	01	04	42	28
34	96	27	13	16	01	03	03	24

Table C-1 - continued

Ss	Dependent Variable of Classroom Parent Participation	Teacher Verbal Control	Teacher Nonverbal Control	Teacher Positive Affect	Teacher Negative Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
35	06	55	16	04	10	03	22	24
36	20	46	02	07	05	01	35	23
37	52	21	09	04	01	01	01	24
38	34	23	08	11	03	02	05	26
39	20	30	12	03	05	02	02	22
40	11	48	10	02	06	01	08	26
41	65	21	02	03	03	03	07	24
42	13	83	06	00	13	05	05	24
43	10	22	04	12	01	03	30	22
44	46	23	13	22	01	04	12	23
45	114	53	10	05	10	03	03	22
46	150	56	04	00	09	01	01	27
47	50	19	04	12	00	01	01	28
48	47	29	11	03	02	01	01	27
49	39	13	03	00	02	03	05	27
50	20	23	06	14	00	03	04	26
51	19	06	13	16	02	06	12	23
52	00	06	01	04	00	03	05	23

Table C-1 - continued

Ss	Dependent Variable of Classroom Parent Participation	Teacher Verbal Control	Teacher Nonverbal Control	Teacher Positive Affect	Teacher Negative Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
54	74	39	09	14	00	02	12	29
55	65	12	01	11	00	03	23	28
56	28	19	08	07	01	02	03	28
57	35	45	06	15	00	03	03	29
58	36	33	04	00	05	04	06	30
59	40	31	05	14	00	01	01	29
60	23	56	08	08	04	01	03	28
M:	60.12	27.12	7.18	11.38	2.10	2.61	9.91	26.27
s:	54.55	15.15	4.57	7.01	3.28	1.54	9.98	2.46

Table C-2

Data Analysis II Variables

Ss	Dependent Variable of Classroom Parent Participation	Strong Teacher Control	Medium Teacher Verbal Control	Medium Teacher Nonverbal Control	Level 1, Teacher Verbal Control	Level 2, Teacher Nonverbal Control	Level 2, Teacher Verbal Control	Level 1, Teacher Nonverbal Control	Teacher Positive Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
1	98	00	04	00	02	01	03	02	16	06	10	28
2	58	00	05	00	02	02	00	01	09	05	16	25
3	138	00	04	00	01	00	02	01	19	02	02	27
4	110	00	03	02	08	02	04	06	22	05	09	28
5	117	00	04	00	06	02	02	03	18	05	08	28
6	27	00	07	00	05	02	03	00	12	02	02	25
7	239	00	02	01	05	00	00	02	14	02	02	26
8	50	04	05	00	05	00	02	00	12	07	05	25
9	98	01	04	01	06	01	01	00	20	03	03	28
10	98	00	04	00	03	01	01	03	17	02	02	30
11	65	08	04	00	07	01	01	01	13	02	20	28
12	29	04	04	01	04	02	04	01	06	01	01	26
13	63	01	04	00	04	02	02	01	20	03	10	19
14	72	00	04	01	07	03	00	00	17	04	14	27
15	94	00	04	00	04	02	02	03	25	01	30	29
16	44	20	05	02	05	01	02	00	03	02	15	24

Table C-2 - continued

Ss	Dependent Variable of Classroom Parent Participation	Strong Teacher Control	Medium Teacher Verbal Control	Medium Teacher Nonverbal Control	Level 1, Teacher Verbal Control	Level 2, Teacher Nonverbal Control	Level 2, Teacher Verbal Control	Level 1, Teacher Nonverbal Control	Teacher Positive Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
17	46	04	04	02	03	02	03	04	16	01	02	25
18	116	12	07	00	05	04	00	00	05	01	05	25
19	13	01	04	00	04	02	01	00	19	04	04	29
20	17	00	02	00	01	00	02	00	06	01	17	25
21	100	01	06	02	02	00	02	00	10	01	01	25
22	24	00	01	00	10	01	01	06	26	01	01	31
23	151	04	06	01	06	02	01	00	12	04	14	26
24	37	02	07	01	06	02	01	03	10	02	32	28
25	51	00	01	00	03	01	03	00	27	02	05	29
26	35	05	06	01	02	01	02	01	16	01	15	24
27	23	00	02	00	05	02	00	03	10	01	15	27
28	72	02	03	01	00	01	01	00	04	03	18	29
29	160	00	02	00	04	02	05	01	04	05	10	27
30	49	00	02	00	02	01	03	03	12	01	15	28
31	39	01	01	00	07	02	02	03	15	01	01	24
32	35	00	02	00	03	00	00	04	20	04	27	28
33	266	03	02	00	04	01	01	00	01	04	42	28
34	06	04	02	00	06	00	01	04	16	03	03	24

Table C-2 - continued

Ss	Dependent Variable of Classroom Parent Participation	Strong Teacher Control	Medium Teacher Verbal Control	Medium Teacher Nonverbal Control	Level 1, Teacher Verbal Control	Level 2, Teacher Nonverbal Control	Level 2, Teacher Verbal Control	Level 1, Teacher Nonverbal Control	Teacher Positive Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
35	06	17	05	00	05	04	01	00	04	03	22	24
36	20	11	05	00	02	01	01	00	07	01	35	23
37	52	02	04	01	03	01	01	00	04	01	01	24
38	34	04	04	00	03	04	02	00	11	02	05	26
39	20	07	05	02	03	03	00	00	03	02	02	22
40	11	11	06	03	05	00	02	01	02	01	08	26
41	65	05	04	00	00	01	00	00	02	03	07	24
42	13	24	08	00	03	01	03	00	00	05	05	24
43	10	02	03	01	09	00	00	01	12	03	30	22
44	46	01	03	02	08	01	03	05	22	04	12	23
45	114	15	05	00	08	03	04	00	05	03	03	22
46	150	16	05	00	04	00	03	00	00	01	01	27
47	50	07	01	00	06	01	05	02	12	01	01	28
48	47	03	07	02	04	02	00	01	03	01	01	27
49	39	03	02	10	01	00	01	00	00	03	05	27
50	20	01	04	02	03	00	02	00	14	03	04	26
51	19	03	00	01	02	05	00	00	16	06	12	23
52	00	00	01	00	03	00	00	01	14	03	05	23

Table C-2 - continued

Ss	Dependent Variable of Classroom Parent Participation	Strong Teacher Control	Medium Teacher Verbal Control	Medium Teacher Nonverbal Control	Level 1, Teacher Verbal Control	Level 2, Teacher Nonverbal Control	Level 2, Teacher Verbal Control	Level 1, Teacher Nonverbal Control	Teacher Positive Affect	Follow Through Years Teaching	Total Years Teaching	Average Classroom Enrollment
53	40	02	07	00	01	05	02	02	10	03	24	29
54	74	03	05	00	07	02	02	05	13	02	12	29
55	65	00	01	00	03	00	03	01	11	03	23	28
56	28	01	03	02	04	01	03	00	07	02	02	28
57	35	03	07	00	06	01	02	00	15	03	03	29
58	36	08	05	00	05	02	00	00	00	04	06	30
59	40	00	07	01	07	01	03	00	14	01	01	29
60	23	08	07	00	08	02	04	00	08	01	03	28
M:	60.12	3.78	4.02	.57	4.35	1.45	1.75	1.25	11.37	2.62	9.92	26.27
s:	53.44	5.43	1.95	.81	2.30	1.24	1.35	1.68	7.03	1.54	9.98	2.46

BIBLIOGRAPHY

Alpert, J. C. Teacher behavior across ability groups: A consideration of the mediation of Pygmalion effects. Journal of Educational Psychology, 1974, 66, 348-353.

Balzer, L. Teacher behaviors and student inquiry in biology. American Biology Teacher, 1970, 32, 26-28.

Bauch, J. P., Vietze, P. M., & Morris, V. D. What makes the difference in parental participation? Childhood Education, 1973, 50, 47-53.

Brottman, M. A. A model for preschool-primary teacher education. Park Forest South, Illinois: Governors State University, 1971. (ERIC Document Reproduction Service No. ED 069 605)

Committee Substitute for Senate Bill No. 96. Florida statutes-chapter 74-238, Tallahassee, Fla., June 19, 1974.

Dixon, W. J. (Ed.). BMD biomedical computer programs. Los Angeles, Calif.: University of California Press, 1973.

Dunteman, G., & Rao, A. V. A report on two national samples of Head Start classes: Some aspects of child development of participants in full year 1967-68 and 1968-69 programs (Final Report). Durham, N. C.: Research Triangle Institute, 1972. (ERIC Document Reproduction Service No. ED 013 371)

Fagot, B. I. Influence of teacher behavior in the preschool. Developmental Psychology, 1973, 9, 198-206.

Feshbach, N. D., & Feshbach, S. Imitation of teacher preferences in a field setting. Developmental Psychology, 1972, 7, 84.

Flanders, N. A. Analyzing teaching behavior. Reading, Mass.: Addison-Wesley, 1970.

Freidman, P., & Bowers, N. D. Student imitation of a rewarding teacher's verbal style as a function of sex and grade level. Journal of Educational Psychology, 1971, 62, 487-491.

Goldberg, G. Effects of nonverbal teacher behavior on student performance. Dissertation Abstracts International, 1972, 33, 1513A. (Abstract)

Goldberg, G. & Mayerberg, C. K. Emotional reactions of students to nonverbal teacher behavior. The Journal of Experimental Education, 1973, 42, 29-32.

Good, T. L., & Brophy, J. E. Looking in classrooms. New York: Harper & Row, 1973.

Gordon, I. J. The Florida Parent Education Program. Gainesville, Fla.: Institute for Development of Human Resources & Florida Educational Research and Development Council, 1972.

Gordon, I. J., Greenwood, G. E., Ware, W. B., & Olmsted, P. P. The Florida Parent Education Follow Through Program. Gainesville, Fla.: Institute for Development of Human Resources & Florida Educational Research and Development Council, 1974.

Hillsborough Follow Through Project Staff. Project Follow Through-teacher guide book. Tampa, Fla.: Hillsborough County Public Schools, 1974-75.

Hudgins, B. B., & Ahlbrand, W. P., Jr. Some properties of formal teacher and pupil classroom communication. Psychology in the Schools, 1970, 7, 265-268.

Kerlinger, F. N., & Pedhazur, E. J. Multiple regression in behavioral research. New York: Holt, Rinehart & Winston, 1973.

McDaniel, E. Design of a longitudinal study of educational effects. Washington, D.C.: National Center for Educational Statistics, 1974. (ERIC Document Reproduction Service No. ED 099 125)

Maccoby, E. E., & Zellner, M. Experiments in primary education: Aspects of Project Follow-Through. New York: Harcourt Brace Jovanovich; Inc., 1970.

Measel, W., & Mood, D. W. Teacher verbal behavior and teacher and pupil thinking in elementary school. The Journal of Educational Research, 1972, 66, 99-102.

Middleman, R., & Hawkes, T. H. An experimental field study of the impact of nonverbal communication of affect on children from two socio-economic backgrounds. Philadelphia, Pa.: Temple University, 1972. (ERIC Document Reproduction Service No. ED 061 550)

Parent educator weekly home visit report. Gainesville, Fla.: University of Florida's Institute for Development of Human Resources, 1974.

Ragosta, M. Reliability in classroom observation: Observer effects and stability of behavior. Doctoral disseration, University of Florida, 1974.

Samph, T. Teacher behavior and the reading performance of below-average achievers. The Journal of Educational Research, 1974, 67, 268-270.

Sigel, I. E., & Jackson, J. P. Analysis of the teacher role in educational intervention programs. In I. E. Sigel (Ed.), The role of the teacher in intervention programs. Washington, D.C.: The Merrill-Palmer Institute, 1969. (ERIC Document Reproduction Service No. ED 036 333)

Soar, R. S. An integrative approach to classroom learning. Columbia, S.C.: University of South Carolina and Philadelphia, Pa.: Temple University, 1966. (ERIC Document Reproduction Service No. ED 033 749)

Soar, R. S. The classroom: Teacher-pupil interaction. In J. S. Squire (Ed.), Yearbook 1972, A new look at progressive education. Washington, D. C.: Assoc. for Supervision & Curriculum Development, 1972, pp. 166-204.

Soar, R. S. Final report: Follow Through classroom process measurement and pupil growth (1970-71). Gainesville, Fla.: University of Florida's Institute for Development of Human Resources, June, 1973.

Soar, R. S., & Soar, R. M. Reliability and validity: Florida Climate and Control System (FLACCS). Gainesville, Fla.: University of Florida's Institute for Development of Human Resources, December, 1975.

Spencer, R. J. An empirical study of elementary teacher's attention as reinforcement for student behavior. Child Study Journal, 1973, 3, 145-158.

Stallings, J. An implementation study of seven Follow Through models for education. Menlo Park, Calif.: Stanford Research Institute, 1974. (ERIC Document Reproduction Service No. ED 093 971)

Turner, R. L., & Denny, D. A. Teacher characteristics, teacher behavior, and changes in pupil creativity. Elementary School Journal, 1969, 69, 265-270.

Walberg, H. J. Generalized regression models in educational research. American Educational Research Journal, 1971, 1, 71-91.

Withall, J. Research in systematic observation in the classroom and its relevance to teachers. Journal of Teacher Education, 1972, 23, 330-332.

Wodtke, K. H., & Wallen, N. E. The effects of teacher control in the classroom on pupils creativity-test gains. American Educational Research Journal, 1965, 2, 75-82.

BIOGRAPHICAL SKETCH

Patricia Ellen Hanley was born to Jack Earle and Beatrice Greene Hanley in Charleston, West Virginia, on October 2, 1946. She has a younger brother Robert Stephan and a younger sister Mary Elizabeth.

She attended public schools in Idaho, West Virginia, Maryland, and Florida. Following graduation from Pasco High School, Dade City, Florida, in 1964, Ms. Hanley attended the University of Florida. She received a Bachelor of Arts degree in early childhood and elementary education in 1967, and subsequently taught in elementary and early childhood programs for five and a half years in Dade City.

Graduate studies were undertaken at the University of South Florida for a Master of Arts degree in early childhood education. Advanced graduate studies for a Doctor of Philosophy degree were completed in 1976, at the University of Florida in curriculum and instruction with specialization in early childhood education. While a doctoral student, Ms. Hanley served a graduate assistantship in reading and language arts and was the recipient of a Strengthening Developing Institutions Fellowship. She was also initiated into Kappa

Delta Pi, an honor society in education.

Professional activities have included membership in the Society for Research in Child Development, the Association for Childhood Education International, the Southern Association for Children Under Six, the Board of Directors for Friends of Day Care, and the Tulsa Early Childhood Consortium. Ms. Hanley is presently employed by the University of Tulsa as Program Coordinator for Early Childhood Education.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Ruthellen Crews, Chairperson
Professor of Curriculum and Instruction

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Michael L. Hanes, Cochairperson
Assistant Professor of Curriculum and Instruction

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Kenneth R. Bzoch
Professor of Communicative Disorders

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Robert S. Soar
Professor of Foundations of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Evelyn L. Wenzel
Professor of Curriculum and Instruction

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1976

Dean, College of Education

Dean, Graduate School